S/M NO. : DSL130XEF0

Service Manual
20" LCD TV

CHASSIS : SL-130X

Model : DLX-20J1BHS

Caution
: In this Manual, some parts can be changed for improving. their performance without notice in the parts list. So, if you need the latest parts information, please refer to PPL(Parts Price List)in Service Information Center.

DAEWOO ELECTRONICS

OCT. 2006

Contents

I. Parts with the exception of MODULE

1. Safety Precaution 3
2. Product Specification 4
3. Block Diagram 5
4. Description of video circuit 8
5. Schematic Diagram 9
6. PCB Data 15
7. Trouble Shooting 17
8. Service Part List 25
   8-1 Service Part List 25
9. Power 30
10. Inverter 31
11. Exploded View 33
    11-1 DLX-20J1 33

SOFTWARE INSTALL & UPGRADE

1. Safety Precautions

(1) When moving or laying down a LCD Set, at least two people must work together. Avoid any impact towards the LCD Set.

(2) Do not leave a broken LCD Set on for a long time. To prevent any further damages, after checking the condition of the broken Set, make sure to turn the power (AC) off.

(3) When opening the BACK COVER, you must turn off power (AC) to prevent any electric shock.

(4) When loosening screws, check the position and type of the screw. Sort out the screws and store them separately for reassembling. Because screws holding PCBs are working as electric circuit grounding, make sure to check if any screw is missing when assembling / reassembling. Do not leave any screws inside the set.

(5) A LCD Set contains different kinds of connector cables. When connecting or disconnecting cables, check the direction and position of the cable beforehand.

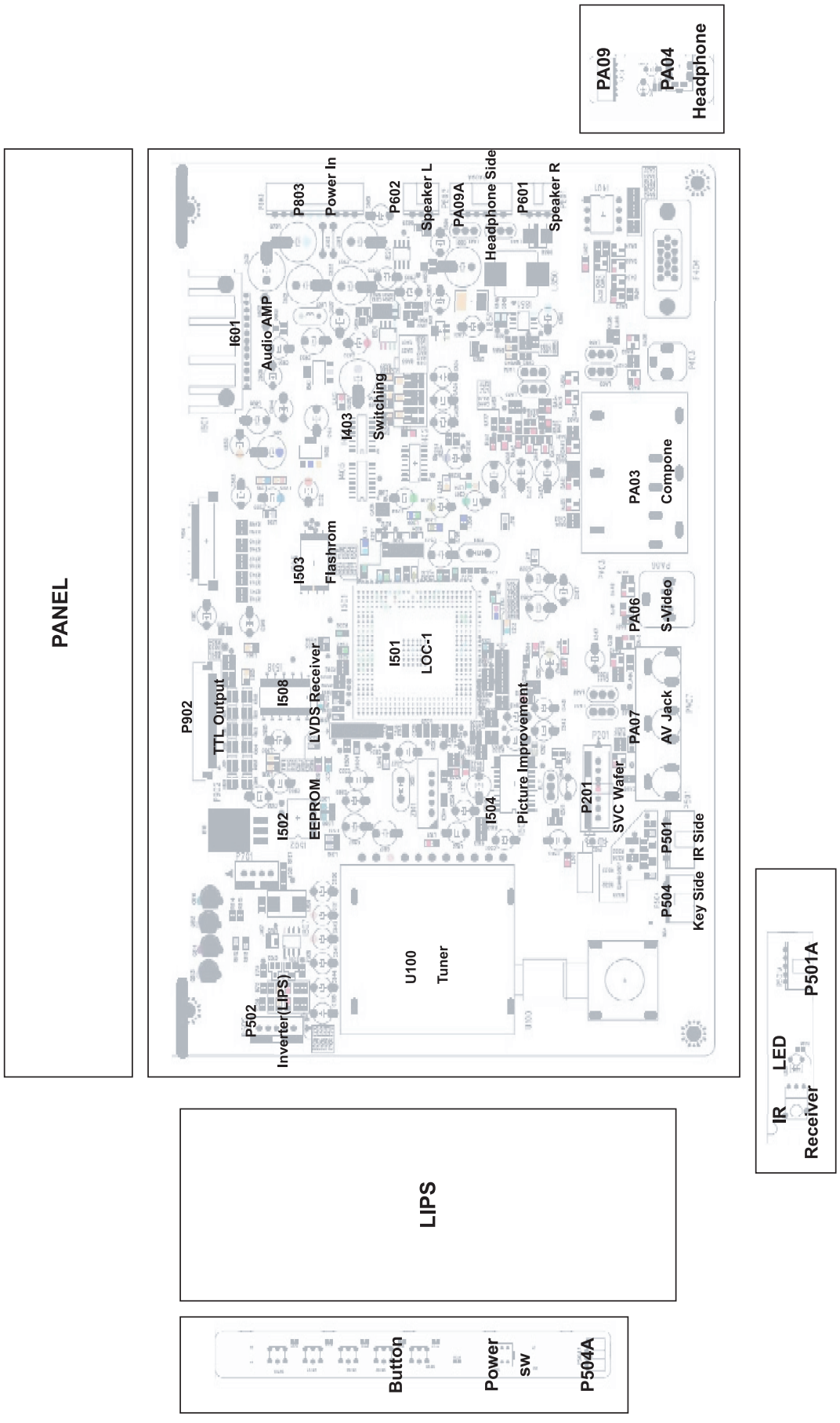
(6) Connect/disconnect the connectors slowly with care especially FFC (film) cables and FPC cables. Do not connect or disconnect connectors instantaneously with force, and handle them carefully for reassembling.

(7) Connectors are designed so that if the number of pins or the direction does not match, connectors will not fit. When having problem in plugging the connectors, check their kind, position, and direction.

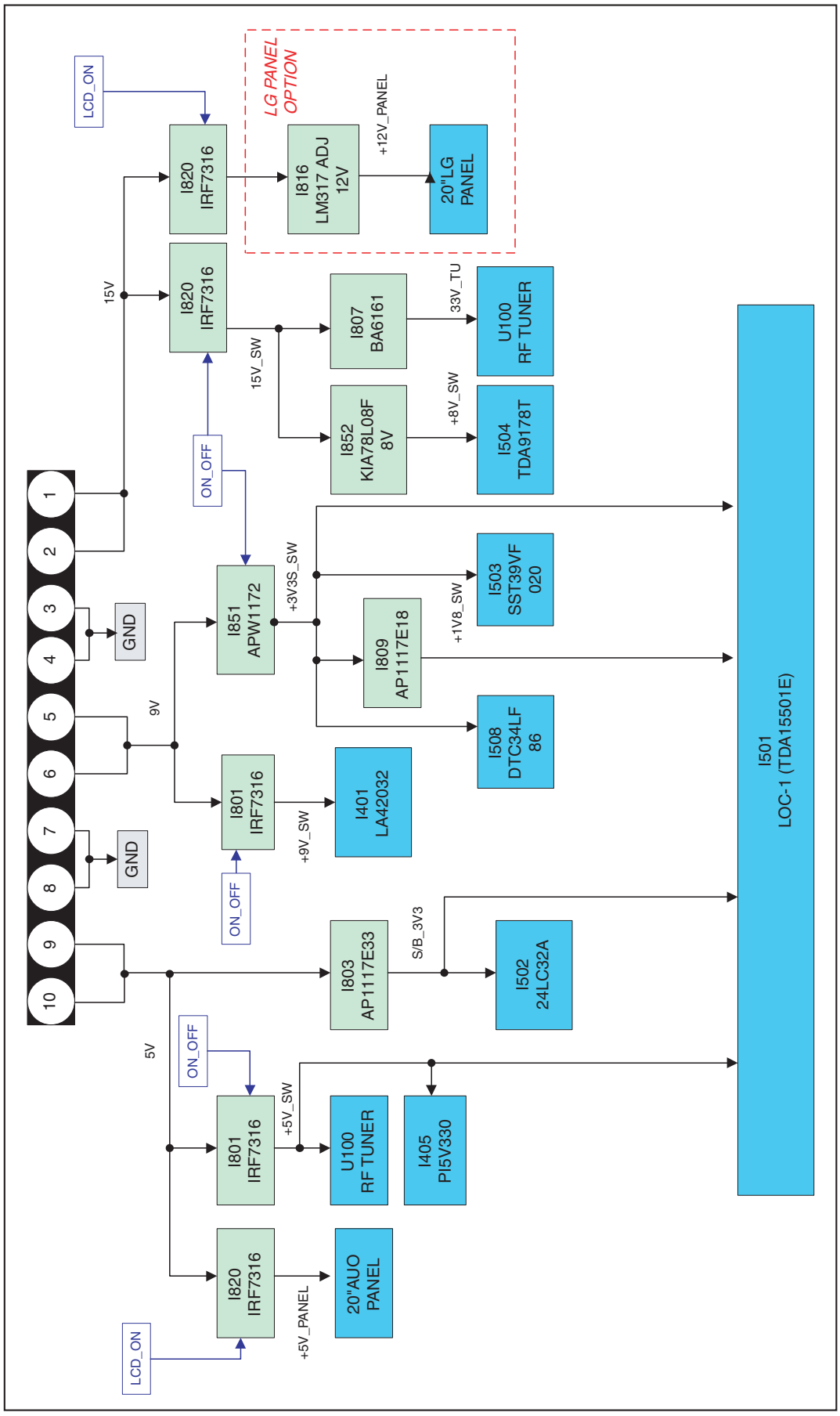
2. Product Specification

MODEL		DLX-20J1
	CHASSIS NO	SL-130X
	Country	South America
	Remote controller	R-48C series
LCD PANEL		
	LCD Type	HT201V01-101(V.5992)
	Screen Size	20.1"
	Aspect Ratio	4 : 3
	Resolution	640 x 480(VGA)
	Pixel Pitch	0.6375(H) X 0.6375(V)
	Brightness	500cd/m²
	Contrast Ratio	700 : 1
	Viewing Angle(U/D/R/L)	160(H) / 140(V)
	Response Time	8ms
TV SYSTEM		
	Color System	NTSC/ PAL
	Color System	NTSC-M / PAL-M,N
	Tuning Method	FS
	Tuner	TAEA-H071D(LG-INNOTEK)
	Reception Channel	VHF :
		*AIR : (L) CH 2 - CH 6 /(H) CH7 - CH13
		*CATV : (L) 5A, A, B, A-5~A-1, CH2 - CH6 (H) C - W+11, CH7 - CH13
		UHF :
		*AIR : CH 14 - CH 69
		*CATV : W+12 - W+84
	IF & SubCarier	PIF :
		45.75MHz
		SIF :
		41.25MHz
		S-subcarrier :
		4.5MHz
		Color-subcarrier :
		NTSC-M(3.579545MHz), PAL-N(3.582056MHz), PAL-M(3.575611MHz)
	Audio System	FM + AM / STEREO & SAP
	Channel Memory	181 channels
Input		
	TV Input	75 Ohm external input terminals for UHF/VHF/Cable
	S-Video Input	SVHS(Y/C) x 1
	Video/Audio	COMPOSITE(NTSC / PAL M,N) RCA Jack x 1, Audio L/R x 1
	Component/Audio	Component Video/Audio In(Y, Pb, Pr) [480i, 480p, 720p, 1080i]
	PC Input	-
	PC Audio Input	-
Ouput		
	Headphone	3.5mm Mini Stereo Jack x 1
Other Features		
	Comb Filter	2D
	CTI	O
	LTI	O
	OSD	English/Espanol/Francais/Porutugal
	CC	O
	Audio Output	4W(2W + 2W)
	Speaker	3W 8Ω
	Aspect ratio control	X
	Auto power off	O
	Wake up	O
	Sleep timer	O
	Wall mount hole	VESA compatible
Power Consumption		
	Consumption	50W
	Stand-by	Under 1W
	Power Source	LIPS, AC 100~240V, 50/60Hz
Dimension(W x H x D)mm		
	Set dimension(with STAND)	514(W) X 498(H) X 257.3(D) mm
	Tilt(Front/Back)	10 / 10
	Weight	7.9KG
USER CONTROL & ACCESSORIES		
	Control button(SET)	Power PR DN PR UP VOL DN VOL UP MENU
	Accessories	Instruction manual Remote controller Battery(AAA x 2 : option)

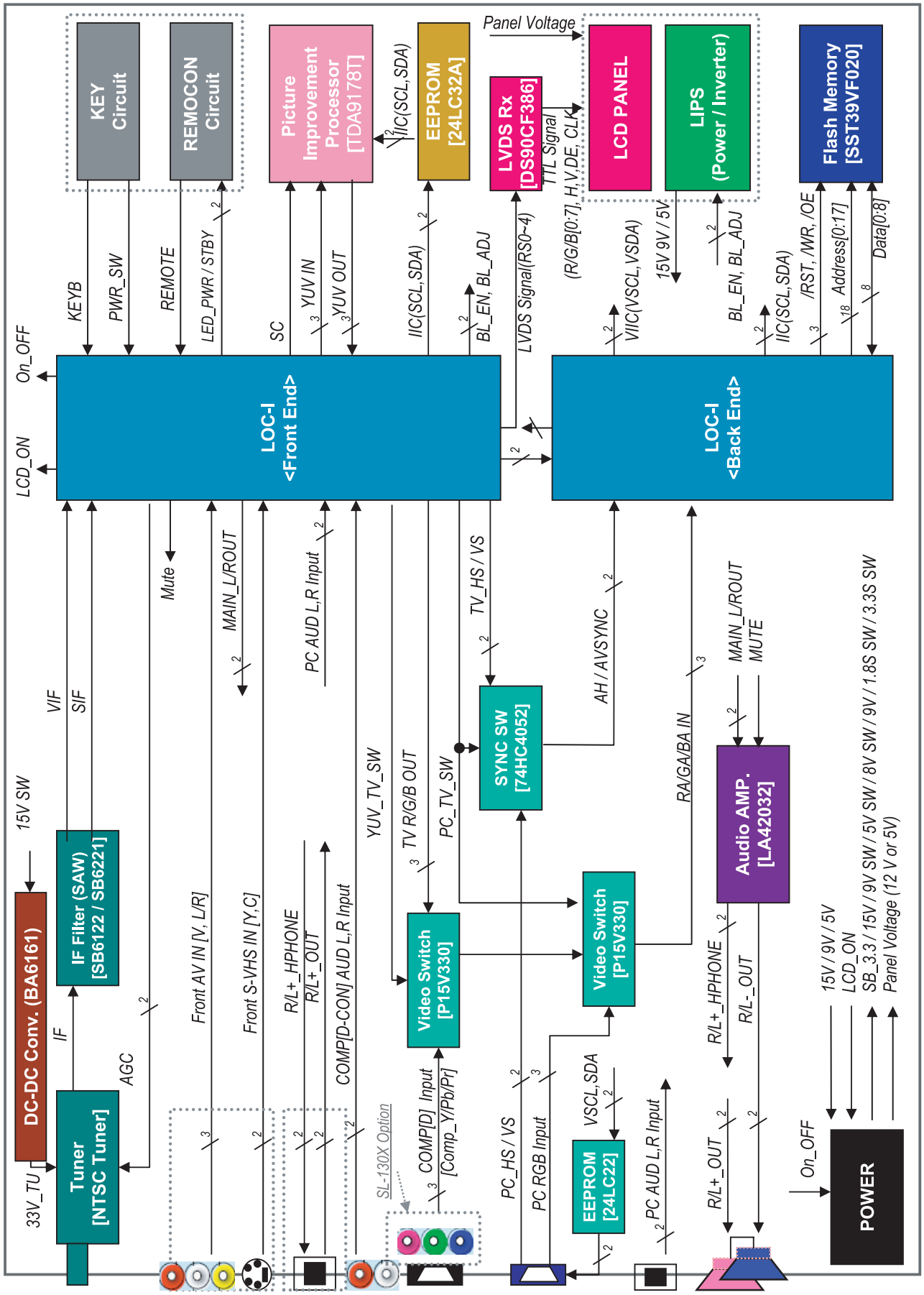
3. Block Diagram



Block Diagram



Block Diagram



4.Description of Video Circuit

SL-130X video circuit:

Process input signals <Analog-TV signal,CVBS(NTSC),Y/C Signal> to produce Output signal for LCD panel.(J1/D7 : 640 x 480 , W2 : 1366 x 768)

Introduction for main IC

4-1. I501(TDA15521E)

The LCD One Chip 1(LOC 1)series combines the functionsof a Video Signal Processor(VSP) together with aFLASH embedded main microcontroller(doing TEXT and TV control)and an LCD
panel controller.In addition the following functions are available:
-Adaptive digital(4H/2H)PAL/NTSC comb filter
-Teletext decoder with 10 page text memory
-Multi-standard stereo decoder

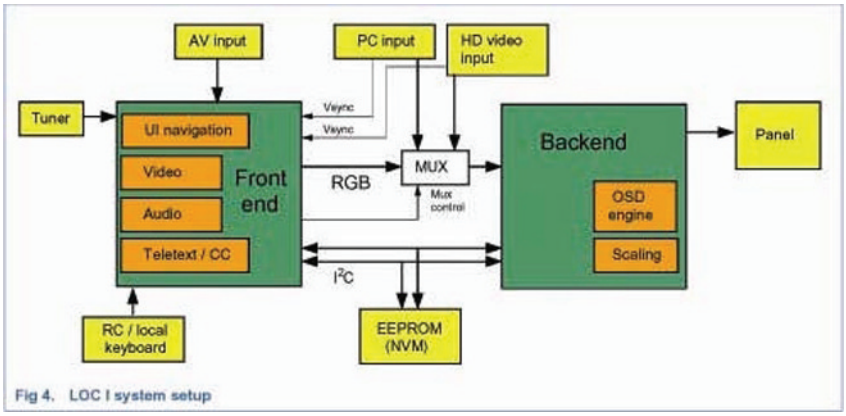
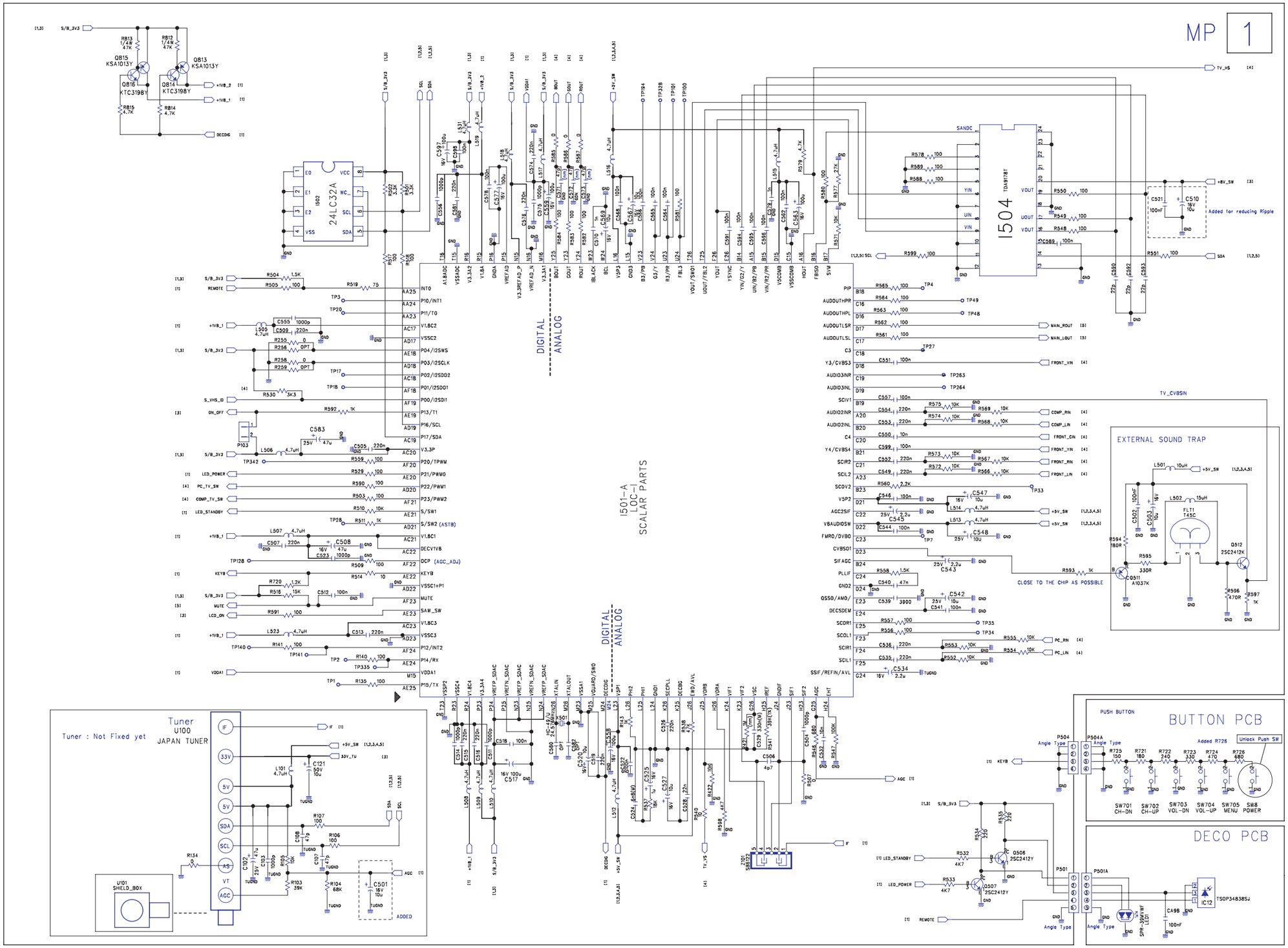


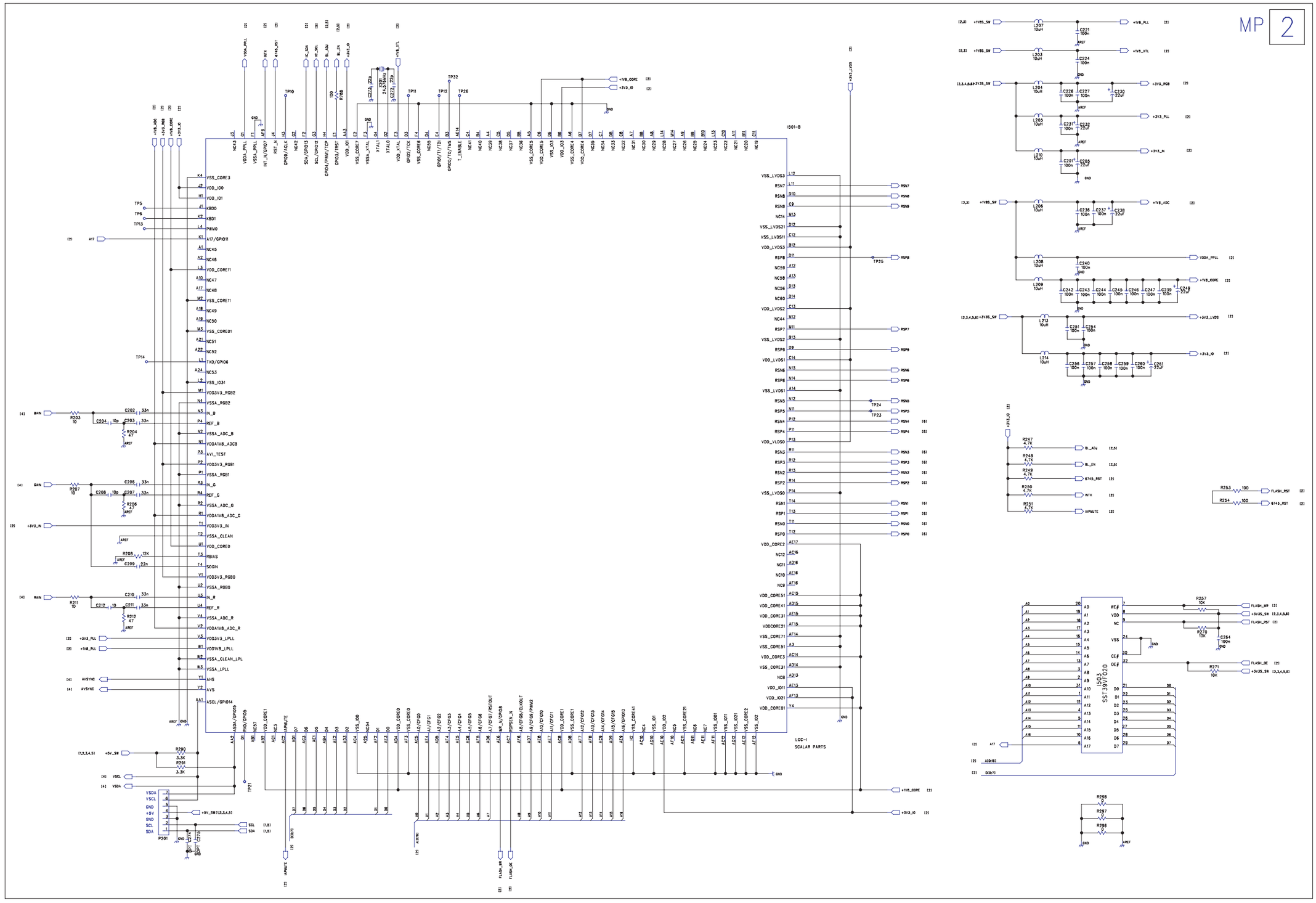
Fig 4. LOC I system setup

Microconroller
-80C51 microcontroller core standard instruction set and timing
-256k x 8bit program ROM
-8k x 8bitauxiliary RAM
-8bit ADC with 4 multiplexed inputs.
-I2C byte level bus interface

5. Schematic Diagram



Schematic Diagram



MP 3

P803
CONN-YH025-10

I801
IRF7316

Q802
2SC2412K

Q804
2SC2412K

Q820
2SC2412K

Q850
2SC2412K

I803
AP1117E33A

I852
KIA7BL08F
PWR for TDA9178

I820
IRF7316

I807
BA6161

I809
AP1117E 18A

Q805
2SC2412K

I851
APW1172

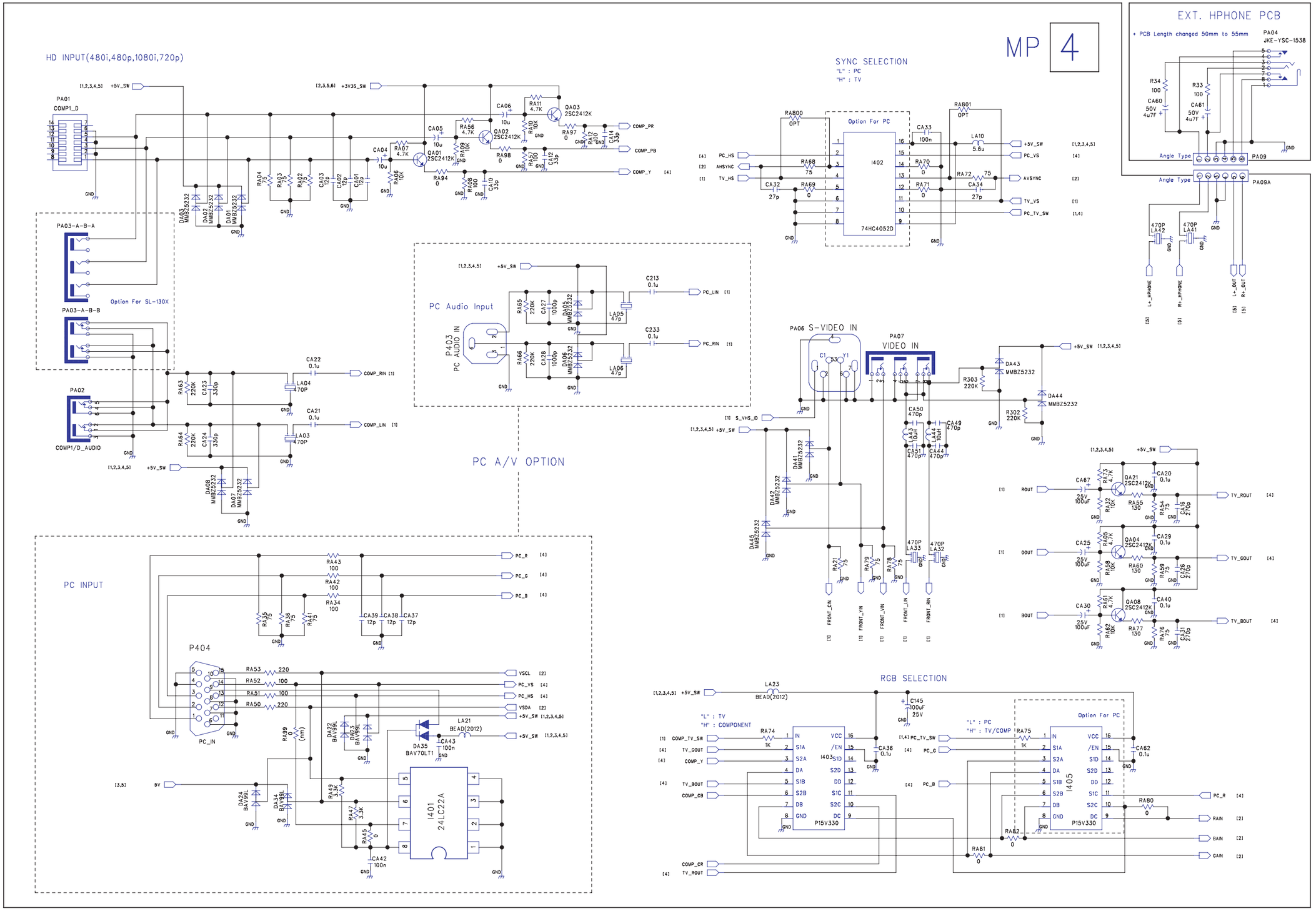
I816
OPT(LM317BD2T)

PANEL POWER SELECTION
5V
J301 : AU020"
J302 : LPL20"
J301 JUMPER
J302 OPT_JUMPER

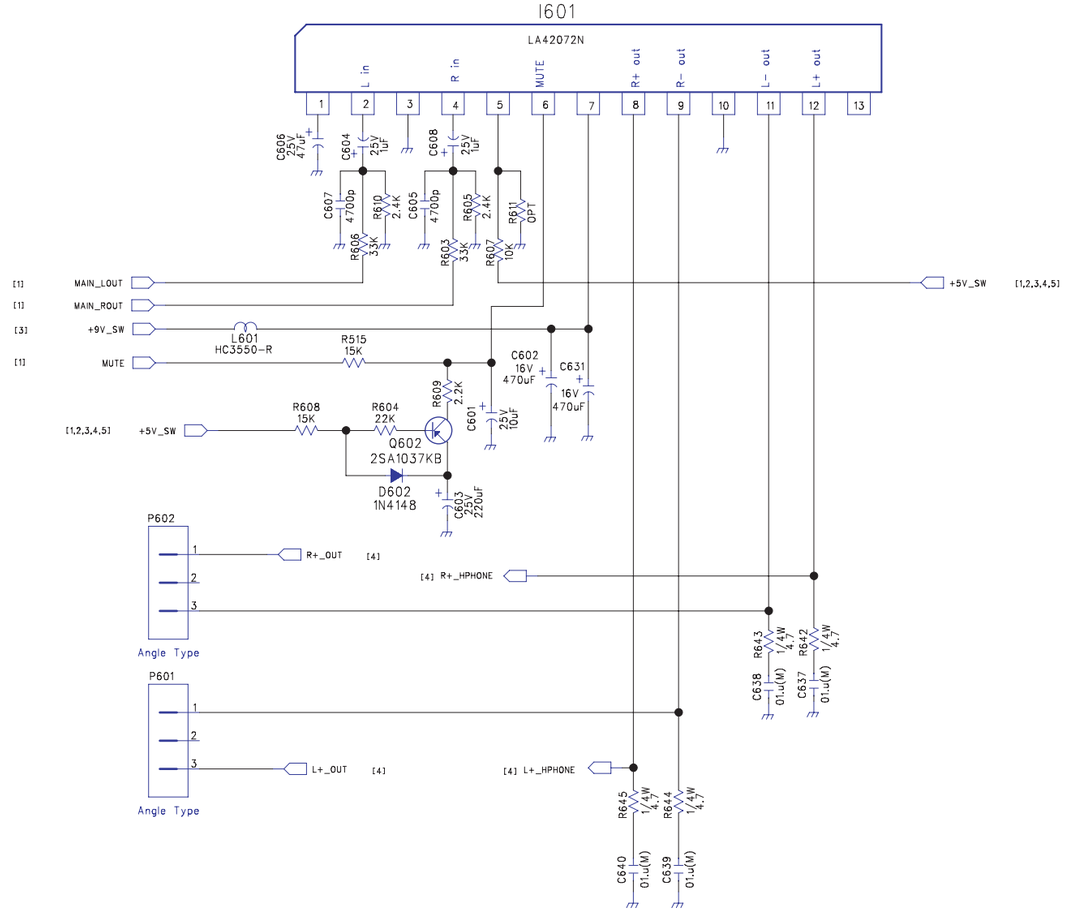
15V SW
PANEL_PWR
FOR AU020" PANEL
FOR LG20" PANEL
3.45V

How to adjust the Voltage
Vout = 1.235 * (R880+R881)/R881
Vfb = 1.235V(Typical)

Schematic Diagram

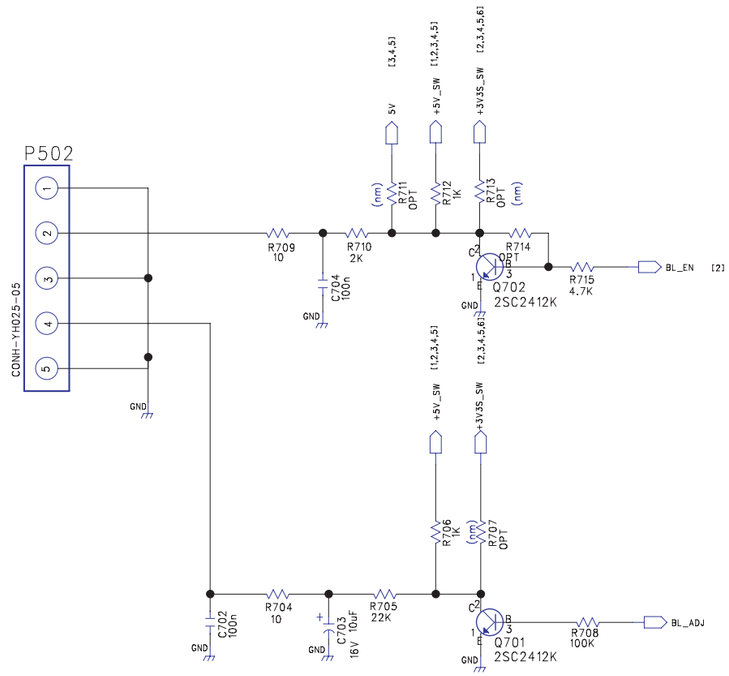


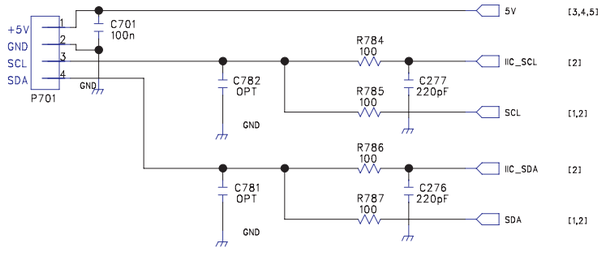
AUDIO AMP



BACK_LIGHT

MP 5





MP 6

P905 P906

Image Data Signal(TTL) / Control Signal(CLK, H,V, DE)

LPL Panel Only

C926 C925 C924 C923 C921 C922

L925 L924 L923 L922 L920 L921

Default : 5V FOR AUO 20"_20"Wide PANEL

Option : 12V FOR LG 20"_20"Wide PANEL

R751 0

R752 OPT (nm)

L902 4.7uH

LVDS FOR LG_20"WIDE

L906 L903 L904 4.7uH

C903 10uF 16V

C905 C909 10uF 16V

C908 C910 C911 C904 C913 C914 100n

I508

DS90CF386

TTL FOR 20" 4:3

P902 TTL

P503 LVDS_30

C711 C917 47uF 25V C918 100n

R934 R931 R932 R933 100

R913 10K

R915 10K

R912 R918 R921 R925 R928 100

R749 R750 R745 R746 R747 R748 R743 R744 R741 R742 0

R773 R772 R771 R770 OPT

+Select Interface Format

VCC(3V3) : "DISM"

GND : "LG"

+Select Inversion Mode

OPEN : Pole Period->1Frame

GND : Pole Period->2Frame

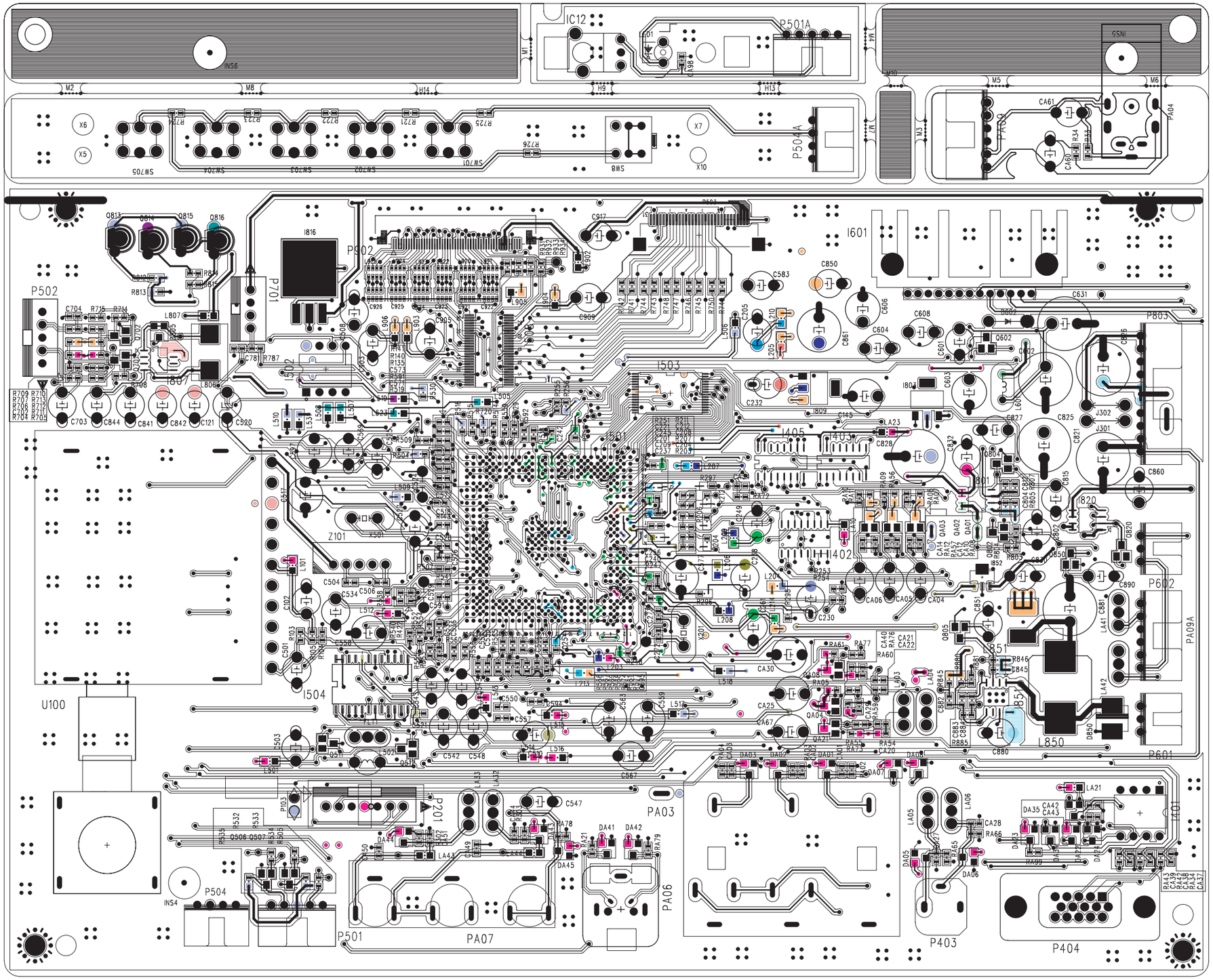
+LCD Test Option

OPEN : Auto Generation Pattern

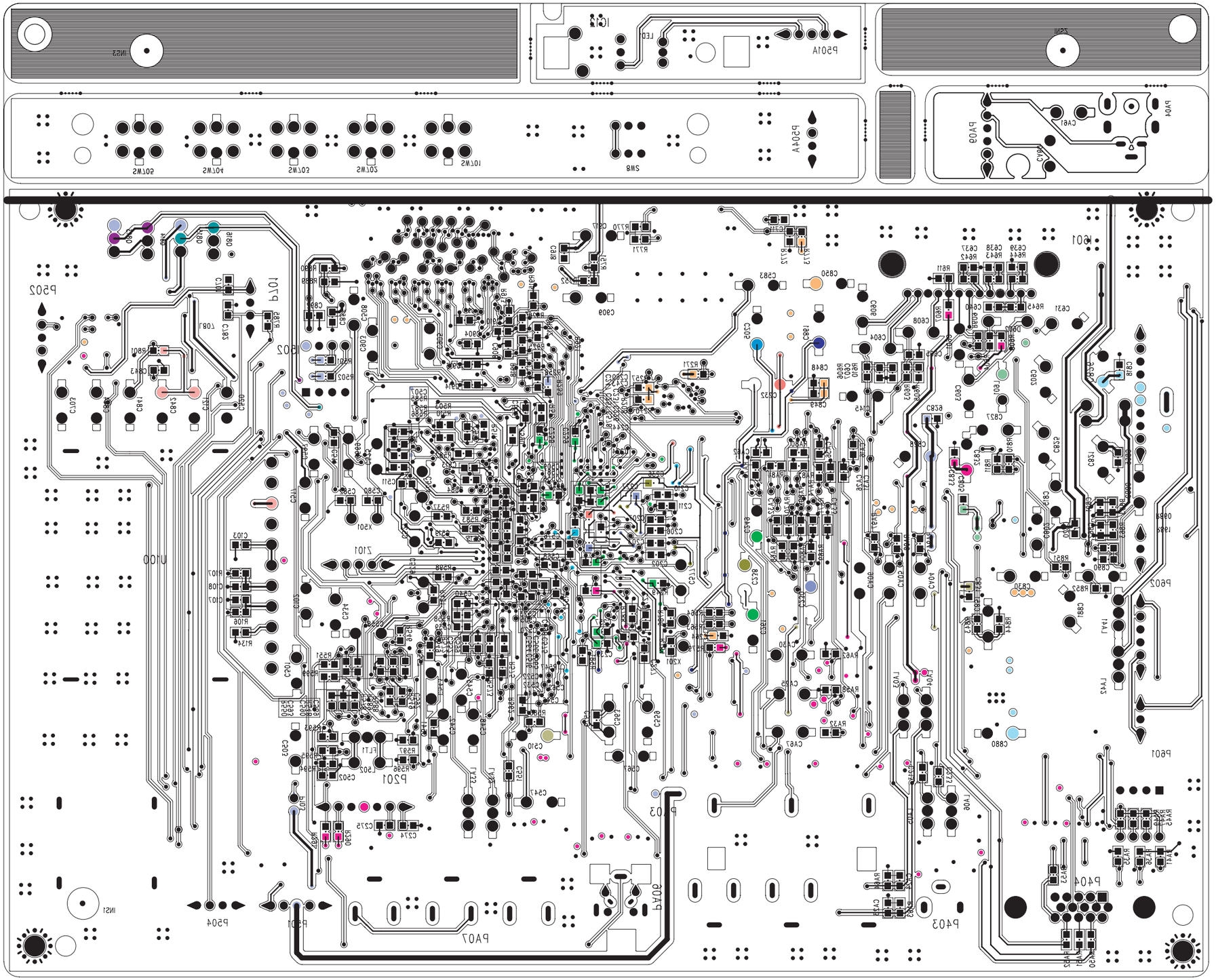
GND : No Signal Block

6. PCB Data

TOP



BOTTOM


P502
P501
P601
P602
P603
P604
P201
P202
P203
P204
P205
P206
P207
P501A
P504A
LED
SW9
SW1
SW2
SW3
SW4
SW5
SW6
SW7
SW8
IC201
IC501
IC601
IC602
IC603
IC604
IC605
IC606
IC607
IC608
IC609
IC610
IC611
IC612
IC613
IC614
IC615
IC616
IC617
IC618
IC619
IC620
IC621
IC622
IC623
IC624
IC625
IC626
IC627
IC628
IC629
IC630
IC631
IC632
IC633
IC634
IC635
IC636
IC637
IC638
IC639
IC640
IC641
IC642
IC643
IC644
IC645
IC646
IC647
IC648
IC649
IC650
IC651
IC652
IC653
IC654
IC655
IC656
IC657
IC658
IC659
IC660
IC661
IC662
IC663
IC664
IC665
IC666
IC667
IC668
IC669
IC670
IC671
IC672
IC673
IC674
IC675
IC676
IC677
IC678
IC679
IC680
IC681
IC682
IC683
IC684
IC685
IC686
IC687
IC688
IC689
IC690
IC691
IC692
IC693
IC694
IC695
IC696
IC697
IC698
IC699
IC700
IC701
IC702
IC703
IC704
IC705
IC706
IC707
IC708
IC709
IC710
IC711
IC712
IC713
IC714
IC715
IC716
IC717
IC718
IC719
IC720
IC721
IC722
IC723
IC724
IC725
IC726
IC727
IC728
IC729
IC730
IC731
IC732
IC733
IC734
IC735
IC736
IC737
IC738
IC739
IC740
IC741
IC742
IC743
IC744
IC745
IC746
IC747
IC748
IC749
IC750
IC751
IC752
IC753
IC754
IC755
IC756
IC757
IC758
IC759
IC760
IC761
IC762
IC763
IC764
IC765
IC766
IC767
IC768
IC769
IC770
IC771
IC772
IC773
IC774
IC775
IC776
IC777
IC778
IC779
IC780
IC781
IC782
IC783
IC784
IC785
IC786
IC787
IC788
IC789
IC790
IC791
IC792
IC793
IC794
IC795
IC796
IC797
IC798
IC799
IC800
IC801
IC802
IC803
IC804
IC805
IC806
IC807
IC808
IC809
IC810
IC811
IC812
IC813
IC814
IC815
IC816
IC817
IC818
IC819
IC820
IC821
IC822
IC823
IC824
IC825
IC826
IC827
IC828
IC829
IC830
IC831
IC832
IC833
IC834
IC835
IC836
IC837
IC838
IC839
IC840
IC841
IC842
IC843
IC844
IC845
IC846
IC847
IC848
IC849
IC850
IC851
IC852
IC853
IC854
IC855
IC856
IC857
IC858
IC859
IC860
IC861
IC862
IC863
IC864
IC865
IC866
IC867
IC868
IC869
IC870
IC871
IC872
IC873
IC874
IC875
IC876
IC877
IC878
IC879
IC880
IC881
IC882
IC883
IC884
IC885
IC886
IC887
IC888
IC889
IC890
IC891
IC892
IC893
IC894
IC895
IC896
IC897
IC898
IC899
IC900
IC901
IC902
IC903
IC904
IC905
IC906
IC907
IC908
IC909
IC910
IC911
IC912
IC913
IC914
IC915
IC916
IC917
IC918
IC919
IC920
IC921
IC922
IC923
IC924
IC925
IC926
IC927
IC928
IC929
IC930
IC931
IC932
IC933
IC934
IC935
IC936
IC937
IC938
IC939
IC940
IC941
IC942
IC943
IC944
IC945
IC946
IC947
IC948
IC949
IC950
IC951
IC952
IC953
IC954
IC955
IC956
IC957
IC958
IC959
IC960
IC961
IC962
IC963
IC964
IC965
IC966
IC967
IC968
IC969
IC970
IC971
IC972
IC973
IC974
IC975
IC976
IC977
IC978
IC979
IC980
IC981
IC982
IC983
IC984
IC985
IC986
IC987
IC988
IC989
IC990
IC991
IC992
IC993
IC994
IC995
IC996
IC997
IC998
IC999
IC1000

7. Trouble Shooting

* Facts you must know at trouble diagnosis or repairing

(1) The trouble diagnosis and repairing of set means Module .
In other words, find out which PCB modules are not working and replace them with normal PCB modules.

(2) This TROUBLE SHOOTING list only contains representative and simple PCB trouble diagnosis and Module Exchange method. Therefore, if you find Sets which are difficult to diagnose or to repair, contact Daewoo Electronics.

(3) Basic TROUBLE SHOOTING procedure :

Check Trouble Symptoms → Detach Back Cover → Trouble Diagnosis → Replace broken PCB module → Heat-run (for at least 30 minutes, input Test pattern full white) → Adjust white balance → Function Check → Repair Complete.

(4) Required equipments for trouble diagnosis

- Digital Multi-meter (measure Dc voltage, measure Diode Voltage, Short-Open test)
- Screwdriver (or electric screwdriver), plastic adjusting tool

(5) Before assemble/disassemble PCBs, check to see if AC Switch is OFF.

(6) After Back cover is closed, redo Heat-run for at least one hour by inputting Full white pattern.

Symptoms of LIPS, power, inverter, panel Trouble

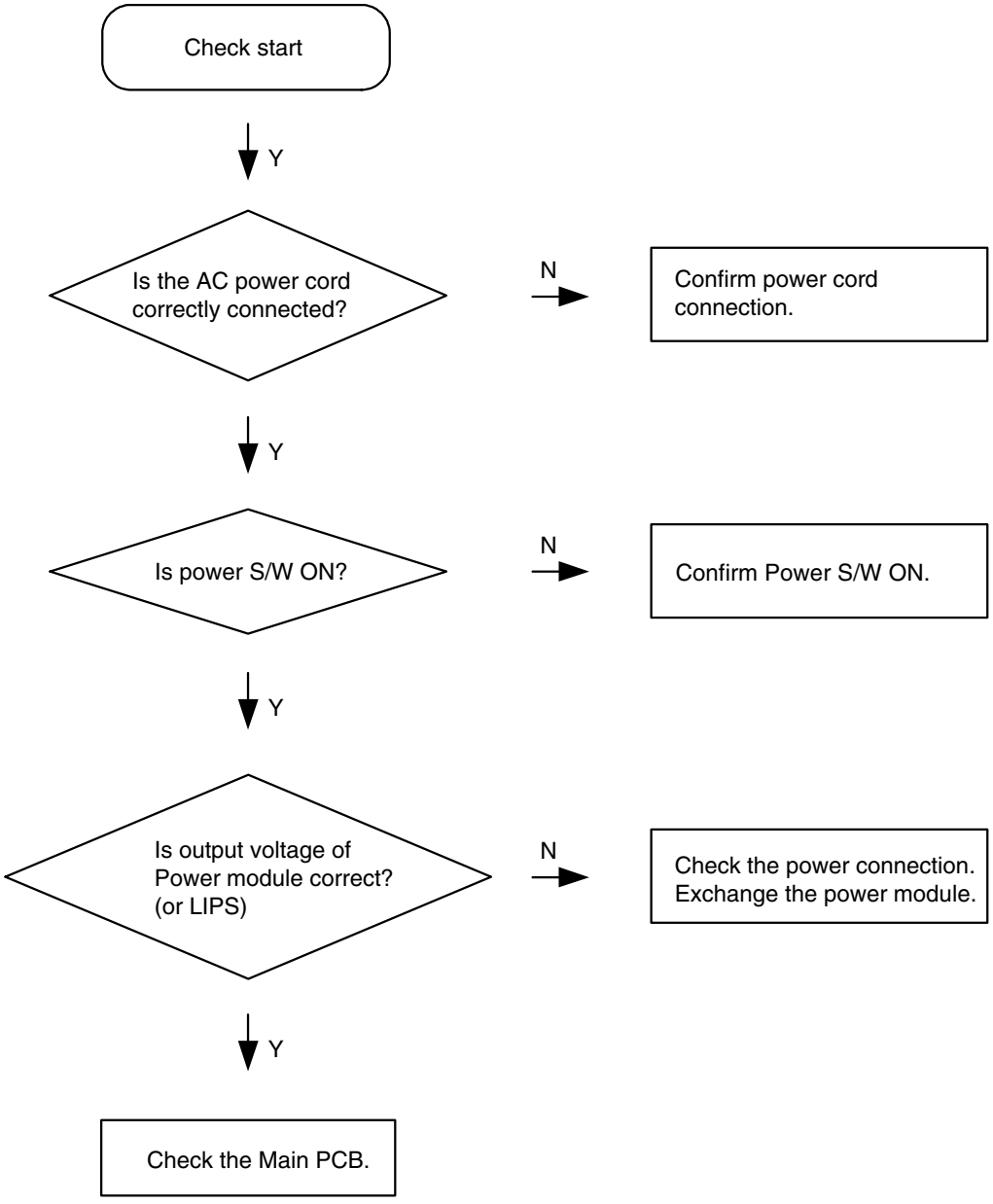
<Symptom.1> Not even weak discharge (luminescence) shows on screen.
<Symptom.2> Discharge (luminescence) on screen is unstable
<Symptom.3> Set is producing unusual noise

Symptoms of VIDEO or JACK PCB Trouble

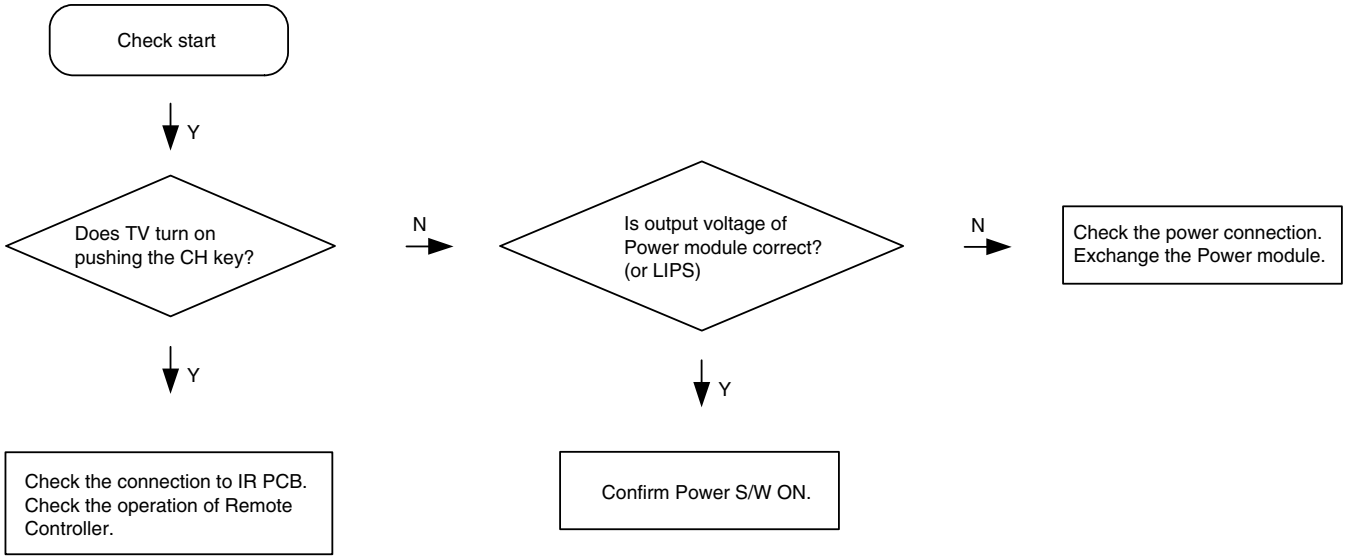
<Symptom.1> Only weak discharge (luminescence) shows on screen, but No Data is on screen
<Symptom.2> Screen DATA is abnormal
<Symptom.3> Particular input signal (Video, etc.) does not operate
<Symptom.4> No SOUND
<Symptom.5> Remote Control or KEY does not operate

Trouble Shooting

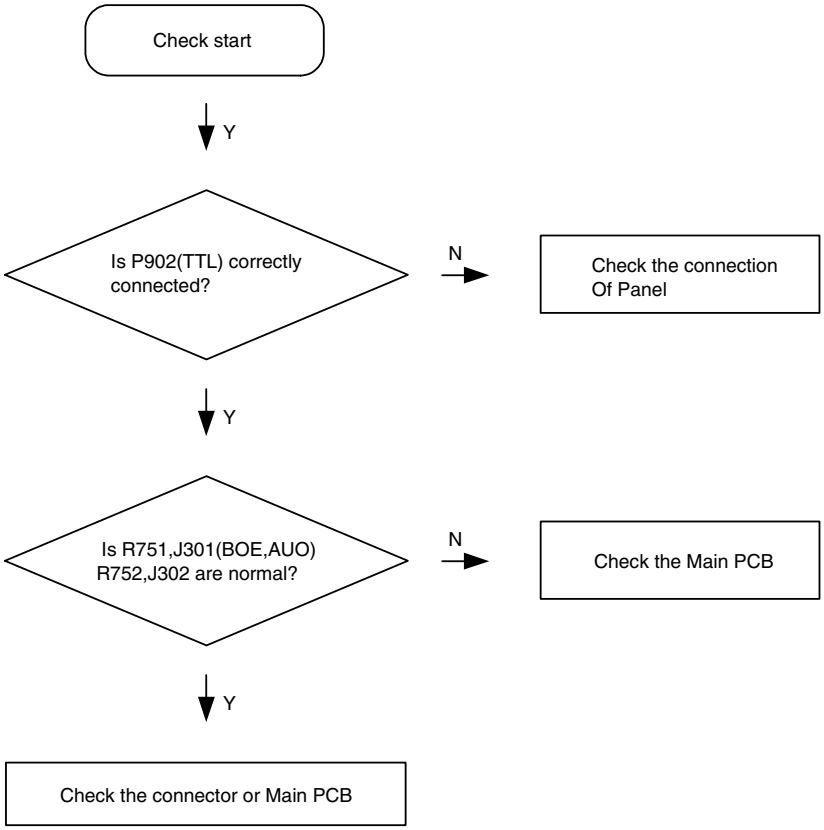
7-1. When LED doesn't lit.



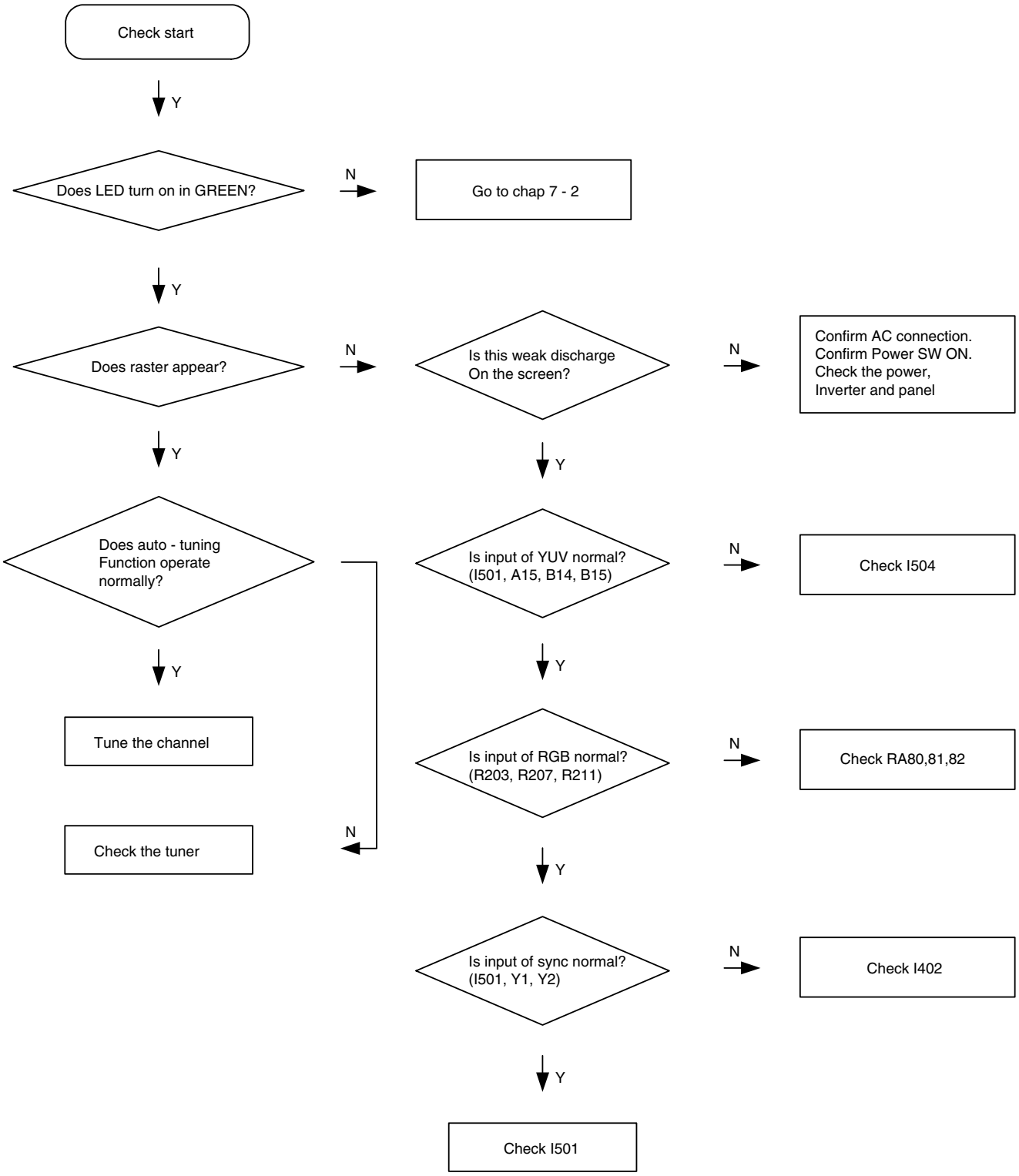
7-2. When TV doesn't turn on in red LED.


Check start
Y
Does TV turn on pushing the CH key?
N
Is output voltage of Power module correct? (or LIPS)
N
Check the power connection. Exchange the Power module.
Y
Y
Check the connection to IR PCB. Check the operation of Remote Controller.
Confirm Power S/W ON.

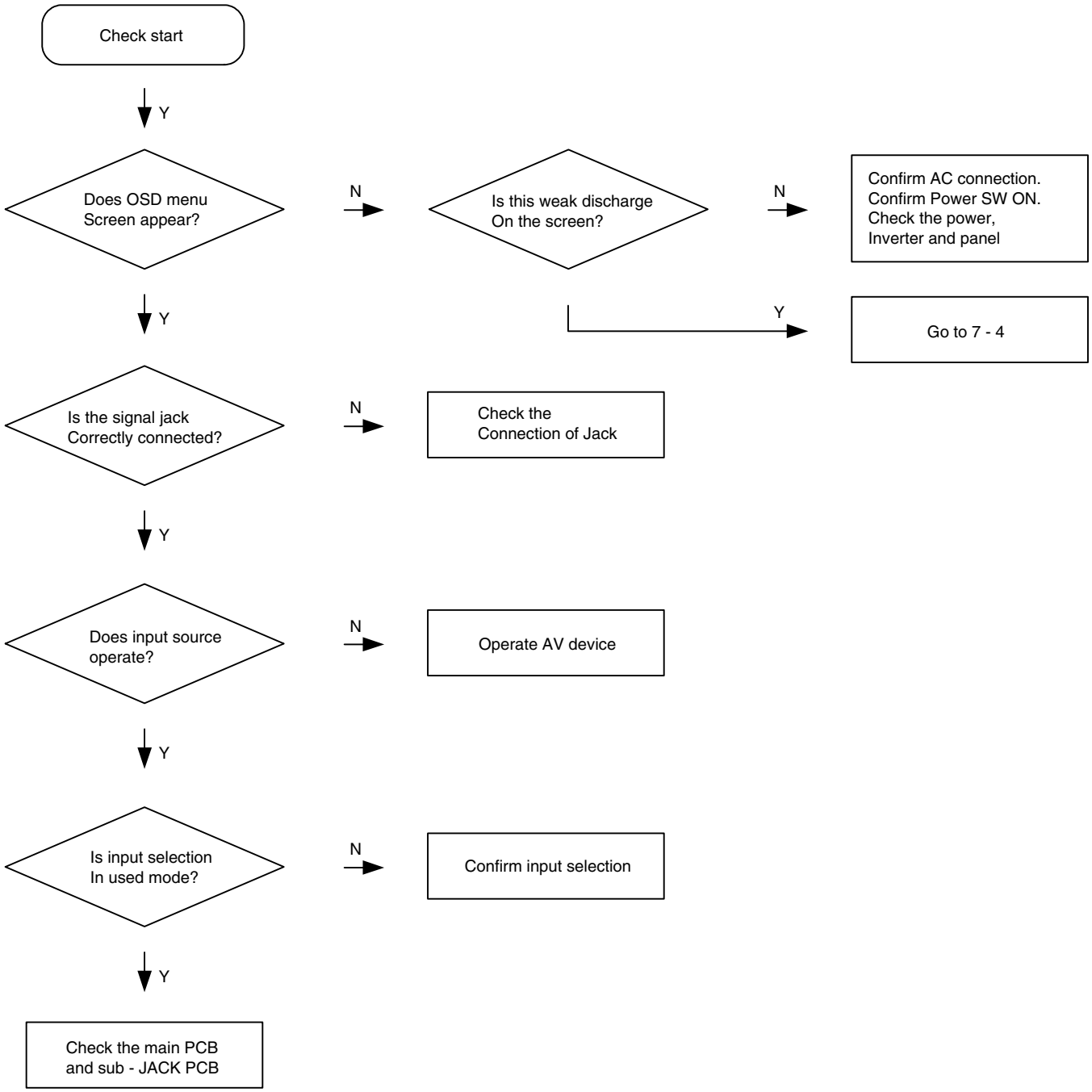
7-3. When "white screen".



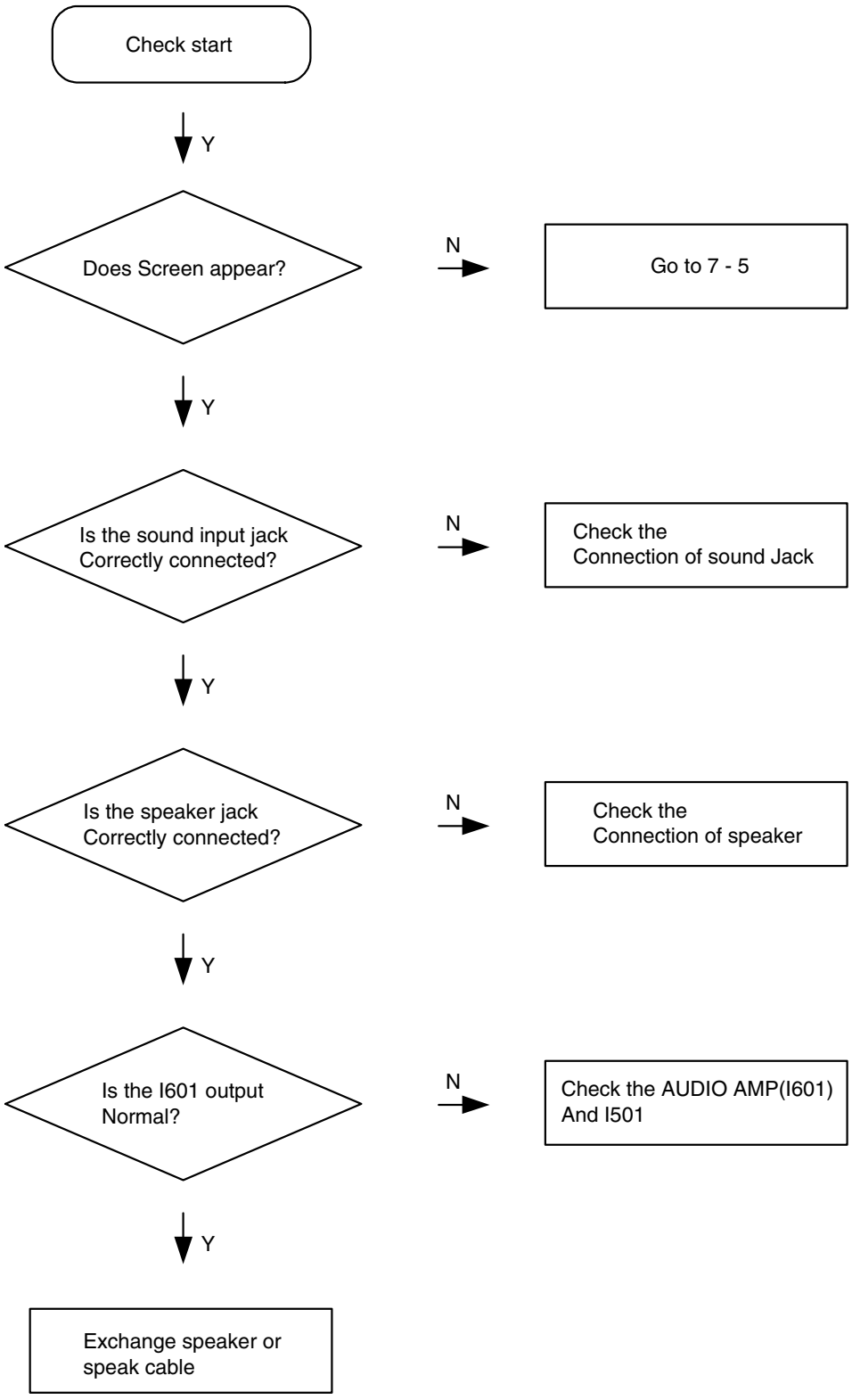
7-4. When “No picture” in TV mode.



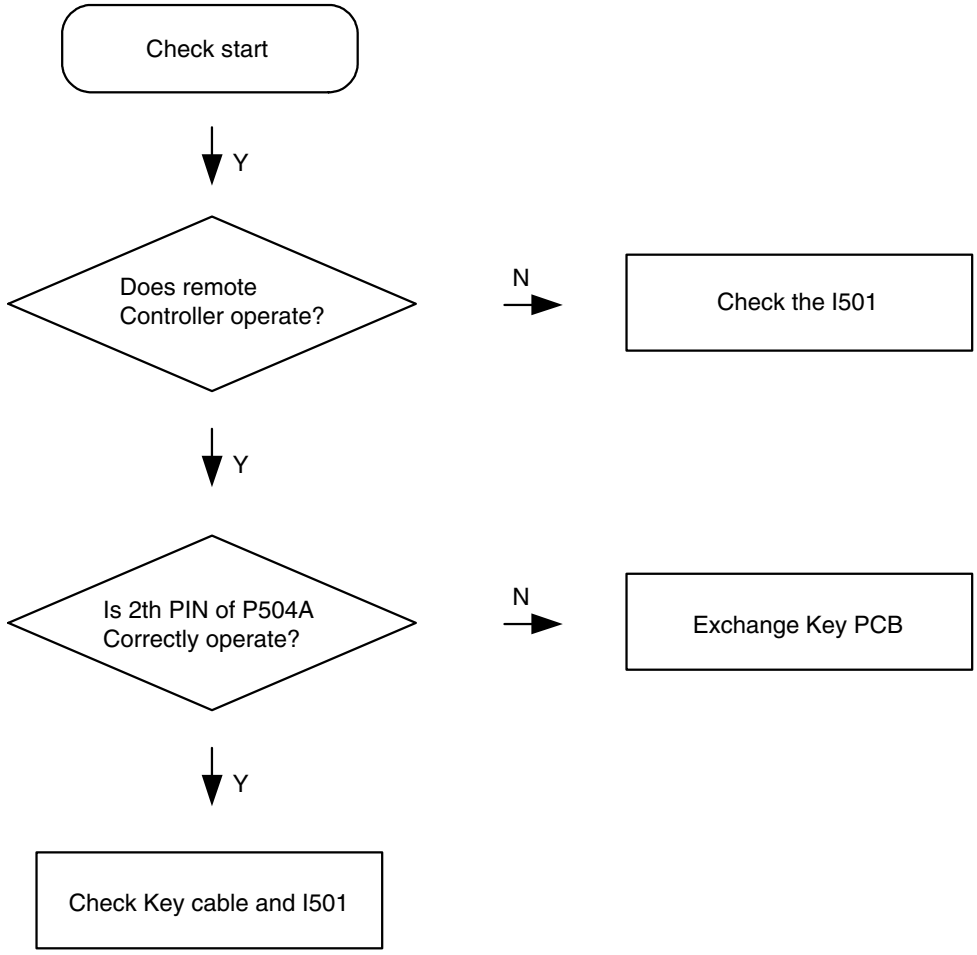
7-5. When “No picture” in External input mode.



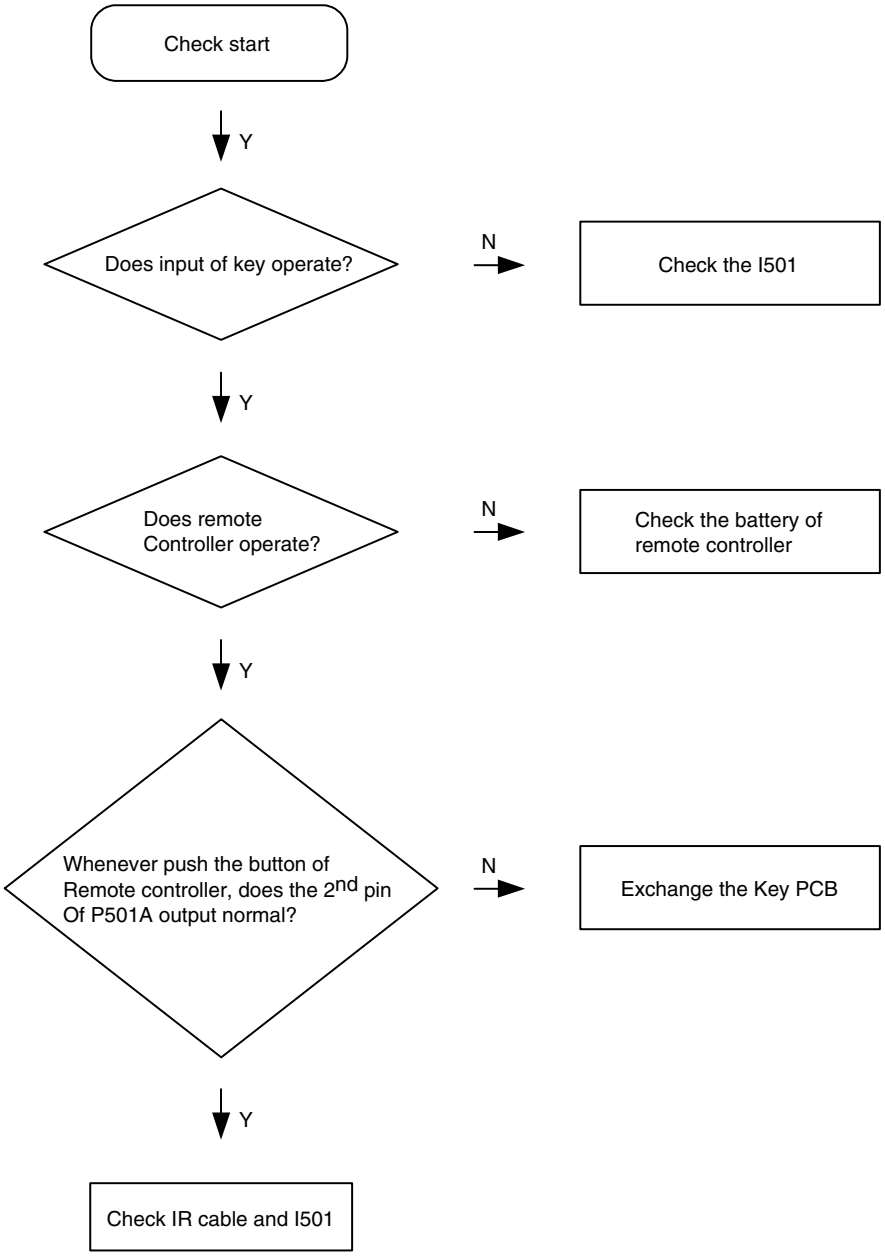
7-6. When No Sound in External input mode.



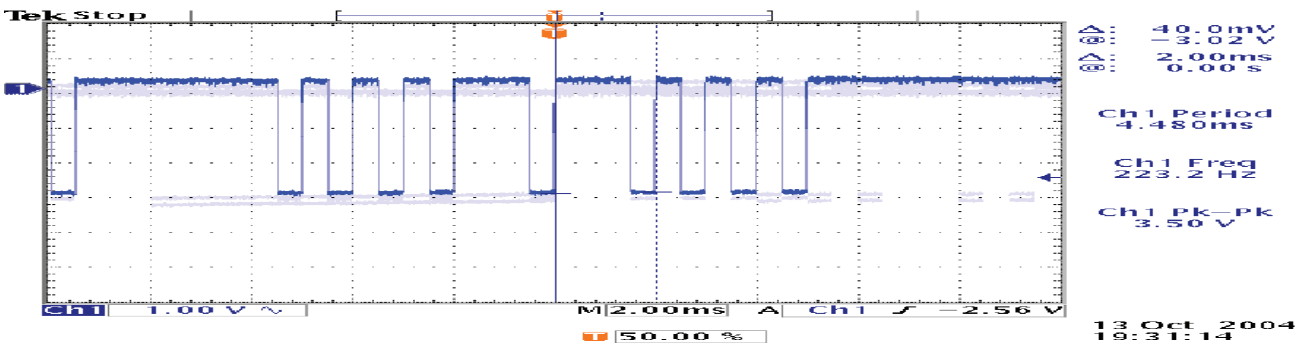
7-7. When Key does not operate.



7-8. When Remote Controller does not operate.



Output of 2nd pin of P501A (IR) : PCB for Remote Control EX) Push “PR DOWN” button.



8. Service part list

8-1. Service part list

LOC	PART CODE	PART NAME	DESCRIPTION	REMARK
PA902	4859005960	CABLE FFC	0.50P-50N-100L-T5	
V901	485LD12202	LCD PANEL	HT201V01-101(5992)	
V902	485AS00600	POWER LIPS	IPB-6015N02	
SP01	4858318310	SPEAKER	SP-5090F01C	
SP01A	4850703S78	CONNECTOR	YH025-03+YRT205+YRT110+USW=500	
SP02	4858318310	SPEAKER	SP-5090F01C	
SP02A	4850703S77	CONNECTOR	YH025-03+YRT205+YRT110+USW=300	
C825	CEXF1C102V	C ELECTRO	16V RSS 1000MF (10X20) TP	
C828	CEXF1C102V	C ELECTRO	16V RSS 1000MF (10X20) TP	
D602	D1N4148---	DIODE	1N4148 (TAPPING)	
FLT1	5PX4M50C00	FILTER CERA	TPSRA4M50C00-B0 (BULK)	
I502	124LC32A-P	IC EEPROM	24LC32A-I/P 32K 8 PIN DIP STICK	
I601	PTB2SW7724	HEAT SINK ASS`Y	1LA42032E- + 7174300851	
00001	1LA42032E-	IC AUDIO AMP	LA42032-E	
0000A	4857027724	HEAT SINK	AL EX	
IC12	1TS0P34838	IC PREAMP	TSOP34838SJ	
J301	85801060GY	WIRE COPPER	1/0.6 TIN COATING	
LED1	DSPR39MVW-	LED	SPR-39MVW (DUAL)	
P103	4859295520	CONN WAFER	4602-02MV2-60-1 PLUG 2P ST	
P201	485923202S	CONN WAFER	YW025-07 (STICK)	
P501	4859236220	CONN WAFER	YAW025-05	
P501A	4859236220	CONN WAFER	YAW025-05	
P502	4859231820	CONN WAFER	YW025-05	
P504	4859236120	CONN WAFER	YAW025-04	
P504A	4859236120	CONN WAFER	YAW025-04	
P601	4859236020	CONN WAFER	YAW025-03	
P602	4859236020	CONN WAFER	YAW025-03	
P701	485923172S	CONN WAFER	YW025-04 (STICK)	
P803	4859236720	CONN WAFER	YAW025-10	
PA03	4859112750	JACK PIN	DPSE-0375 5PIN STR	
PA04	4859102130	JACK EARPHONE	YSC-1537	
PA06	4859105340	JACK S-VHS	DSW-10 (STRAIGHT)	
PA07	4859112850	JACK PIN	DPSS-0173 3PIN STR	
PA09	4859236320	CONN WAFER	YAW025-06	
PA09A	4859236320	CONN WAFER	YAW025-06	
PA501	4850705S26	CONNECTOR	YH025-05+YH025-05+ULW=350	
PA502	4850705N39	CONNECTOR	YH025-05+YH025-05+ULW=100	
PA504	4850704N40	CONNECTOR	YH025-04+YH025-04+ULW=350	
PA803	4850710S32	CONNECTOR	YH025-10+YH025-10+ULW=500	
PAA09	4850706S41	CONNECTOR	YH025-06+YH025-06+ULW=200	
SW8	5S40101012	SW PUSH	PS-22E06 NL	
U100	4859729830	TUNER VARACTOR	TAEA-H071D	
U101	4850A23740	ANT SHIELD BOX	PAXNF02FA (NTSC)	
X201	5XJ24R576E	CRYSTAL QUARTZ	HC-49/S 24.576MHZ 30PPM	
X501	5XJ24R576E	CRYSTAL QUARTZ	HC-49/S 24.576MHZ 30PPM	
Z101	5PTSB6221C	FILTER SAW	TSB6221C	
C103	HCBK102KBA	C CHIP CERA	50V X7R 1000PF K 1608	
C107	HCQK470JBA	C CHIP CERA	50V CH 47PF J 1608	
C108	HCQK470JBA	C CHIP CERA	50V CH 47PF J 1608	
C202	HCBK333KBA	C CHIP CERA	50V X7R 0.033MF K 1608	
C203	HCBK333KBA	C CHIP CERA	50V X7R 0.033MF K 1608	
C206	HCBK333KBA	C CHIP CERA	50V X7R 0.033MF K 1608	
C207	HCBK333KBA	C CHIP CERA	50V X7R 0.033MF K 1608	
C210	HCBK333KBA	C CHIP CERA	50V X7R 0.033MF K 1608	
C211	HCBK333KBA	C CHIP CERA	50V X7R 0.033MF K 1608	
C213	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C224	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C226	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C227	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C231	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C233	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C236	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C239	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C243	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C244	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C246	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C247	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C251	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	

LOC	PART CODE	PART NAME	DESCRIPTION	REMARK
C257	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C258	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C259	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C260	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C264	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C276	HCQK221JBA	C CHIP CERA	50V CH 220PF J 1608	
C277	HCQK221JBA	C CHIP CERA	50V CH 220PF J 1608	
C502	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C505	HCBH224KBA	C CHIP CERA	25V X7R 0.22MF K 1608	
C507	HCBH224KBA	C CHIP CERA	25V X7R 0.22MF K 1608	
C509	HCBH224KBA	C CHIP CERA	25V X7R 0.22MF K 1608	
C511	HCBK102KBA	C CHIP CERA	50V X7R 1000PF K 1608	
C512	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C513	HCBH224KBA	C CHIP CERA	25V X7R 0.22MF K 1608	
C514	HCBK102KBA	C CHIP CERA	50V X7R 1000PF K 1608	
C515	HCBH224KBA	C CHIP CERA	25V X7R 0.22MF K 1608	
C516	HCBH224KBA	C CHIP CERA	25V X7R 0.22MF K 1608	
C519	HCBH224KBA	C CHIP CERA	25V X7R 0.22MF K 1608	
C522	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C523	HCBK102KBA	C CHIP CERA	50V X7R 1000PF K 1608	
C532	HCBK103KBA	C CHIP CERA	50V X7R 0.01MF K 1608	
C539	HCBK392KBA	C CHIP CERA	50V X7R 3900PF K 1608	
C540	HCBK473KBA	C CHIP CERA	50V X7R 0.047MF K 1608	
C541	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C544	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C546	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C549	HCBH224KBA	C CHIP CERA	25V X7R 0.22MF K 1608	
C551	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C552	HCBH224KBA	C CHIP CERA	25V X7R 0.22MF K 1608	
C555	HCBK102KBA	C CHIP CERA	50V X7R 1000PF K 1608	
C556	HCBK102KBA	C CHIP CERA	50V X7R 1000PF K 1608	
C562	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C564	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C565	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C566	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C568	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C570	HCBK102KBA	C CHIP CERA	50V X7R 1000PF K 1608	
C574	HCBH224KBA	C CHIP CERA	25V X7R 0.22MF K 1608	
C575	HCBK102KBA	C CHIP CERA	50V X7R 1000PF K 1608	
C576	HCBH224KBA	C CHIP CERA	25V X7R 0.22MF K 1608	
C578	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C579	HCBK102KBA	C CHIP CERA	50V X7R 1000PF K 1608	
C581	HCBH224KBA	C CHIP CERA	25V X7R 0.22MF K 1608	
C589	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C590	HCQK220JBA	C CHIP CERA	50V CH 22PF J 1608	
C592	HCQK220JBA	C CHIP CERA	50V CH 22PF J 1608	
C593	HCQK220JBA	C CHIP CERA	50V CH 22PF J 1608	
C598	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C599	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C605	HCBK472KBA	C CHIP CERA	50V X7R 4700PF K 1608	
C607	HCBK472KBA	C CHIP CERA	50V X7R 4700PF K 1608	
C637	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C638	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C639	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C640	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C701	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C805	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C818	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C820	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C829	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C831	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C833	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C843	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C848	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C849	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C862	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C865	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C891	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	

Service part list

LOC	PART CODE	PART NAME	DESCRIPTION	REMARK
C904	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C908	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C910	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C911	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C913	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C914	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C918	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
CA16	HCQK271JBA	C CHIP CERA	50V CH 270PF J 1608	
CA23	HCQK331JBA	C CHIP CERA	50V CH 330PF J 1608	
CA24	HCQK331JBA	C CHIP CERA	50V CH 330PF J 1608	
CA26	HCQK271JBA	C CHIP CERA	50V CH 270PF J 1608	
CA31	HCQK271JBA	C CHIP CERA	50V CH 270PF J 1608	
CA36	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
R106	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R107	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R134	HRFT000-BA	R CHIP	1/10 0 OHM 1608	
R208	HRFT123JBA	R CHIP	1/10 12K OHM J 1608	
R249	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	
R257	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
R258	HRFT000-BA	R CHIP	1/10 0 OHM 1608	
R270	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
R271	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
R290	HRFT332JBA	R CHIP	1/10 3.3K OHM J 1608	
R291	HRFT332JBA	R CHIP	1/10 3.3K OHM J 1608	
R501	HRFT332JBA	R CHIP	1/10 3.3K OHM J 1608	
R502	HRFT332JBA	R CHIP	1/10 3.3K OHM J 1608	
R503	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R510	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
R511	HRFT102JBA	R CHIP	1/10 1K OHM J 1608	
R517	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R537	HRFT183JBA	R CHIP	1/10 18K OHM J 1608	
R546	HRFT681JBA	R CHIP	1/10 680 OHM J 1608	
R547	HRFT104JBA	R CHIP	1/10 100K OHM J 1608	
R548	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R549	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R550	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R551	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R557	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R558	HRFT152JBA	R CHIP	1/10 1.5K OHM J 1608	
R562	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R563	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R564	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R571	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
R572	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
R573	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
R575	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
R578	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R579	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	
R580	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R581	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R582	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R583	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R584	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R585	HRFT000-BA	R CHIP	1/10 0 OHM 1608	
R586	HRFT000-BA	R CHIP	1/10 0 OHM 1608	
R587	HRFT000-BA	R CHIP	1/10 0 OHM 1608	
R588	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R589	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R590	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R593	HRFT102JBA	R CHIP	1/10 1K OHM J 1608	
R594	HRFT181JBA	R CHIP	1/10 180 OHM J 1608	
R595	HRFT331JBA	R CHIP	1/10 330 OHM J 1608	
R596	HRFT471JBA	R CHIP	1/10 470 OHM J 1608	
R597	HRFT102JBA	R CHIP	1/10 1K OHM J 1608	
R598	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	
R599	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R603	HRFT333JBA	R CHIP	1/10 33K OHM J 1608	
R604	HRFT223JBA	R CHIP	1/10 22K OHM J 1608	

LOC	PART CODE	PART NAME	DESCRIPTION	REMARK
R605	HRFT242JBA	R CHIP	1/10 2.4K OHM J 1608	
R606	HRFT333JBA	R CHIP	1/10 33K OHM J 1608	
R607	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
R608	HRFT153JBA	R CHIP	1/10 15K OHM J 1608	
R609	HRFT222JBA	R CHIP	1/10 2.2K OHM J 1608	
R610	HRFT242JBA	R CHIP	1/10 2.4K OHM J 1608	
R642	HRFT479JBA	R CHIP	1/10 4.7 OHM J 1608	
R643	HRFT479JBA	R CHIP	1/10 4.7 OHM J 1608	
R644	HRFT479JBA	R CHIP	1/10 4.7 OHM J 1608	
R645	HRFT479JBA	R CHIP	1/10 4.7 OHM J 1608	
R751	HRFT000-BA	R CHIP	1/10 0 OHM 1608	
R784	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R785	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R786	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R788	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R801	HRFT122JBA	R CHIP	1/10 1.2K OHM J 1608	
R810	HRFT332JBA	R CHIP	1/10 3.3K OHM J 1608	
R811	HRFT123JBA	R CHIP	1/10 12K OHM J 1608	
R843	HRFT332JBA	R CHIP	1/10 3.3K OHM J 1608	
R844	HRFT123JBA	R CHIP	1/10 12K OHM J 1608	
R851	HRFT332JBA	R CHIP	1/10 3.3K OHM J 1608	
R852	HRFT123JBA	R CHIP	1/10 12K OHM J 1608	
R853	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
R860	HRFT332JBA	R CHIP	1/10 3.3K OHM J 1608	
R861	HRFT123JBA	R CHIP	1/10 12K OHM J 1608	
R863	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
R912	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R913	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
R915	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
R918	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R921	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R925	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R928	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
RA32	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
RA58	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
RA62	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
RA63	HRFT224JBA	R CHIP	1/10 220K OHM J 1608	
RA64	HRFT224JBA	R CHIP	1/10 220K OHM J 1608	
RA68	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
RA74	HRFT102JBA	R CHIP	1/10 1K OHM J 1608	
RA75	HRFT102JBA	R CHIP	1/10 1K OHM J 1608	
RA80	HRFT000-BA	R CHIP	1/10 0 OHM 1608	
RA800	HRFT000-BA	R CHIP	1/10 0 OHM 1608	
RA801	HRFT000-BA	R CHIP	1/10 0 OHM 1608	
RA81	HRFT000-BA	R CHIP	1/10 0 OHM 1608	
RA82	HRFT000-BA	R CHIP	1/10 0 OHM 1608	
RA94	HRFT000-BA	R CHIP	1/10 0 OHM 1608	
RA97	HRFT000-BA	R CHIP	1/10 0 OHM 1608	
RA98	HRFT000-BA	R CHIP	1/10 0 OHM 1608	
C102	CEXF1E470V	C ELECTRO	RSS 25V 47MF 5X11 P5.0 TA	
C121	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
C145	CEXF1E101C	C ELECTRO	25V RUS 100MF (6.3X11) TP	
C205	CEXF1C220A	C ELECTRO	16V RSM 22MF (5X7)	
C230	CEXF1C220A	C ELECTRO	16V RSM 22MF (5X7)	
C232	CEXF1C220A	C ELECTRO	16V RSM 22MF (5X7)	
C238	CEXF1C220A	C ELECTRO	16V RSM 22MF (5X7)	
C249	CEXF1C220A	C ELECTRO	16V RSM 22MF (5X7)	
C261	CEXF1C220A	C ELECTRO	16V RSM 22MF (5X7)	
C501	CEXF1C100A	C ELECTRO	16V RSM 10MF 5X7	
C503	CEXF1C100A	C ELECTRO	16V RSM 10MF 5X7	
C508	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP	
C510	CEXF1C100A	C ELECTRO	16V RSM 10MF 5X7	
C517	CEXF1C101A	C ELECTRO	16V RSM 100MF 6X7 TP	
C520	CEXF1C100V	C ELECTRO	16V RSS 10MF 4X7	
C524	CMXM2A682J	C MYLAR	100V 6800PF J (TP)	
C525	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP	
C527	CEXF1C100V	C ELECTRO	16V RSS 10MF 4X7	
C529	CMXL1J334J	C MYLAR	63V MEU 0.33MF J (TP)	

Service part list

LOC	PART CODE	PART NAME	DESCRIPTION	REMARK
C534	CEXF1H229A	C ELECTRO	50V RSM 2.2MF (4X7) TP	
C542	CEXF1C100A	C ELECTRO	16V RSM 10MF 5X7	
C543	CEXF1H229A	C ELECTRO	50V RSM 2.2MF (4X7) TP	
C545	CEXF1H229A	C ELECTRO	50V RSM 2.2MF (4X7) TP	
C547	CEXF1C100A	C ELECTRO	16V RSM 10MF 5X7	
C548	CEXF1C100A	C ELECTRO	16V RSM 10MF 5X7	
C558	CEXF1C101A	C ELECTRO	16V RSM 100MF 6X7 TP	
C559	CEXF1C101A	C ELECTRO	16V RSM 100MF 6X7 TP	
C563	CEXF1C101A	C ELECTRO	16V RSM 100MF 6X7 TP	
C567	CEXF1C100A	C ELECTRO	16V RSM 10MF 5X7	
C569	CEXF1C100V	C ELECTRO	16V RSS 10MF 4X7	
C577	CEXF1C101A	C ELECTRO	16V RSM 100MF 6X7 TP	
C583	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP	
C597	CEXF1C101A	C ELECTRO	16V RSM 100MF 6X7 TP	
C601	CEXF1C100V	C ELECTRO	16V RSS 10MF 4X7	
C602	CEXE1C471E	C ELECTRO	16V RM 470MF (8X11.5) TP	
C603	CEXF1C221V	C ELECTRO	16V RSS 220MF (8X11.5) TP	
C604	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP	
C606	CEXF1E470V	C ELECTRO	RSS 25V 47MF 5X11 P5.0 TA	
C608	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP	
C631	CEXE1C471E	C ELECTRO	16V RM 470MF (8X11.5) TP	
C703	CEXF1C100V	C ELECTRO	16V RSS 10MF 4X7	
C802	CEXF1H479A	C ELECTRO	50V RSM 4.7MF 4X7	
C815	CEXF1H479A	C ELECTRO	50V RSM 4.7MF 4X7	
C821	CEXE1C471E	C ELECTRO	16V RM 470MF (8X11.5) TP	
C826	CEXE1C471E	C ELECTRO	16V RM 470MF (8X11.5) TP	
C827	CEXF1C100V	C ELECTRO	16V RSS 10MF 4X7	
C830	CEXF1H330V	C ELECTRO	50V RSS 33MF (6.3X11) TP	
C832	CEXF1E101V	C ELECTRO	25V RSS 100MF (6.3X11) TP	
C841	CEXF1H479A	C ELECTRO	50V RSM 4.7MF 4X7	
C842	CEXF1H479A	C ELECTRO	50V RSM 4.7MF 4X7	
C844	CEXF1H220V	C ELECTRO	50V RSS 22MF (5X11) TP	
C850	CEXF1C100V	C ELECTRO	16V RSS 10MF 4X7	
C851	CEXF1H479A	C ELECTRO	50V RSM 4.7MF 4X7	
C860	CEXF1H479A	C ELECTRO	50V RSM 4.7MF 4X7	
C861	CEXE1C471E	C ELECTRO	16V RM 470MF (8X11.5) TP	
C880	CEXF1C220A	C ELECTRO	16V RSM 22MF (5X7)	
C881	CEXE1C471E	C ELECTRO	16V RM 470MF (8X11.5) TP	
C890	CEXF1H479A	C ELECTRO	50V RSM 4.7MF 4X7	
C903	CEXF1C100V	C ELECTRO	16V RSS 10MF 4X7	
C905	CEXF1C100V	C ELECTRO	16V RSS 10MF 4X7	
C909	CEXF1C100V	C ELECTRO	16V RSS 10MF 4X7	
C917	CEXF1E470V	C ELECTRO	RSS 25V 47MF 5X11 P5.0 TA	
CA04	CEXF1C100V	C ELECTRO	16V RSS 10MF 4X7	
CA05	CEXF1C100V	C ELECTRO	16V RSS 10MF 4X7	
CA06	CEXF1C100V	C ELECTRO	16V RSS 10MF 4X7	
CA25	CEXF1C101A	C ELECTRO	16V RSM 100MF 6X7 TP	
CA30	CEXF1C101A	C ELECTRO	16V RSM 100MF 6X7 TP	
CA60	CEXF1H479A	C ELECTRO	50V RSM 4.7MF 4X7	
CA61	CEXF1H479A	C ELECTRO	50V RSM 4.7MF 4X7	
CA67	CEXF1C101A	C ELECTRO	16V RSM 100MF 6X7 TP	
L502	5CPX150J--	COIL PEAKING	15UH J (RADIAL)	
L601	58C0000116	COIL BEAD	HC-3550R	
LA03	5PXF1B471M	FILTER EMI	CFI 06 B 1H 470PF	
LA04	5PXF1B471M	FILTER EMI	CFI 06 B 1H 470PF	
LA32	5PXF1B471M	FILTER EMI	CFI 06 B 1H 470PF	
LA33	5PXF1B471M	FILTER EMI	CFI 06 B 1H 470PF	
LA41	5PXF1B471M	FILTER EMI	CFI 06 B 1H 470PF	
LA42	5PXF1B471M	FILTER EMI	CFI 06 B 1H 470PF	
Q813	T2SA1980Y-	TR	2SA1980(N)Y	
Q814	T2SC5343Y-	TR	2SC5343(N)Y	
Q815	T2SA1980Y-	TR	2SA1980(N)Y	
Q816	T2SC5343Y-	TR	2SC5343(N)Y	
SW701	5S50101Z90	SW TACT	THVV502GDA	
SW702	5S50101Z90	SW TACT	THVV502GDA	
SW703	5S50101Z90	SW TACT	THVV502GDA	
SW704	5S50101Z90	SW TACT	THVV502GDA	
SW705	5S50101Z90	SW TACT	THVV502GDA	

LOC	PART CODE	PART NAME	DESCRIPTION	REMARK
A001	4859817592	PCB MAIN	234X189 C4V	
C201	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C204	HCQK100JBA	C CHIP CERA	50V CH 10PF J 1608	
C208	HCQK100JBA	C CHIP CERA	50V CH 10PF J 1608	
C209	HCBK223KBA	C CHIP CERA	50V X7R 0.022MF K 1608	
C212	HCQK100JBA	C CHIP CERA	50V CH 10PF J 1608	
C221	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C237	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C240	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C242	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C245	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C254	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C256	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C272	HCQK220JBA	C CHIP CERA	50V CH 22PF J 1608	
C273	HCQK220JBA	C CHIP CERA	50V CH 22PF J 1608	
C504	HCBK102KBA	C CHIP CERA	50V X7R 1000PF K 1608	
C506	HCQK479CBA	C CHIP CERA	50V CH 4.7PF C 1608	
C518	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C521	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C526	HCBH224KBA	C CHIP CERA	25V X7R 0.22MF K 1608	
C528	HCBK223KBA	C CHIP CERA	50V X7R 0.022MF K 1608	
C535	HCBH224KBA	C CHIP CERA	25V X7R 0.22MF K 1608	
C536	HCBH224KBA	C CHIP CERA	25V X7R 0.22MF K 1608	
C550	HCBK103KBA	C CHIP CERA	50V X7R 0.01MF K 1608	
C553	HCBH224KBA	C CHIP CERA	25V X7R 0.22MF K 1608	
C554	HCBH224KBA	C CHIP CERA	25V X7R 0.22MF K 1608	
C557	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C571	HCQK470JBA	C CHIP CERA	50V CH 47PF J 1608	
C572	HCQK470JBA	C CHIP CERA	50V CH 47PF J 1608	
C573	HCQK470JBA	C CHIP CERA	50V CH 47PF J 1608	
C591	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C594	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C595	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C596	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C702	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C704	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C804	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C812	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C845	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
C882	HCBK222KBA	C CHIP CERA	50V X7R 2200PF K 1608	
C883	HCQK101JBA	C CHIP CERA	50V CH 100PF J 1608	
C884	HCBK103KBA	C CHIP CERA	50V X7R 0.01MF K 1608	
CA01	HCQK120JBA	C CHIP CERA	50V CH 12PF J 1608	
CA02	HCQK120JBA	C CHIP CERA	50V CH 12PF J 1608	
CA03	HCQK120JBA	C CHIP CERA	50V CH 12PF J 1608	
CA10	HCQK330JBA	C CHIP CERA	50V CH 33PF J 1608	
CA12	HCQK330JBA	C CHIP CERA	50V CH 33PF J 1608	
CA14	HCQK330JBA	C CHIP CERA	50V CH 33PF J 1608	
CA20	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
CA21	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
CA22	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
CA29	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
CA40	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
CA44	HCBK471KBA	C CHIP CERA	50V X7R 470PF K 1608	
CA49	HCBK471KBA	C CHIP CERA	50V X7R 470PF K 1608	
CA50	HCBK471KBA	C CHIP CERA	50V X7R 470PF K 1608	
CA51	HCBK471KBA	C CHIP CERA	50V X7R 470PF K 1608	
CA98	HCBK104KBA	C CHIP CERA	50V X7R 0.1MF K 1608	
D805	DBAV70---B	DIODE CHIP	BAV70	
D850	DM2FM3---C	DIODE CHIP SCHOTTKY	M2FM3 M2F TYPE	
DA01	DZ02W5R6VA	DIODE CHIP ZENER	Z02W5.6V	
DA02	DZ02W5R6VA	DIODE CHIP ZENER	Z02W5.6V	
DA03	DZ02W5R6VA	DIODE CHIP ZENER	Z02W5.6V	
DA07	DZ02W5R6VA	DIODE CHIP ZENER	Z02W5.6V	
DA08	DZ02W5R6VA	DIODE CHIP ZENER	Z02W5.6V	
DA41	DZ02W5R6VA	DIODE CHIP ZENER	Z02W5.6V	
DA42	DZ02W5R6VA	DIODE CHIP ZENER	Z02W5.6V	
DA43	DZ02W5R6VA	DIODE CHIP ZENER	Z02W5.6V	

Service part list

LOC	PART CODE	PART NAME	DESCRIPTION	REMARK
DA44	DZ02W5R6VA	DIODE CHIP ZENER	Z02W5.6V	
DA45	DZ02W5R6VA	DIODE CHIP ZENER	Z02W5.6V	
I403	1P15V330-D	IC CHIP VIDEO SWITCH	PI5V330	
I501	1N1FC00AAQ	IC CHIP MULTIMEDIA	TDA15511E N1F C0 0AA	
I503	129LV040AQ	IC CHIP FLASH MEMORY	EN29LV040A-70SCP	
I504	1TDA9178TE	IC CHIP PICTURE IMPROVEMENT	TDA9178TE	
I508	1DTC34LF86	IC CHIP RECEIVER	DTC34LF86A	
I801	TFDS4953-C	FET CHIP	FDS4953 SO-8 -30V -5A REEL	
I803	1AP117E33C	IC CHIP REGULATOR	AP1117E33A 3.3V SOT-223	
I807	1BA6161F-C	IC CHIP SW REG	BA6161F 30~35V 100KHZ SOP8 REEL	
I809	1S111718QC	IC CHIP REGULATOR	S1117-18Q 1.8V SOT-223	
I820	TFDS4953-C	FET CHIP	FDS4953 SO-8 -30V -5A REEL	
I851	1APW1172-D	IC CHIP DC-DC CONVERTER	APW1172	
I852	1K1A78L08C	IC CHIP REGULATOR	KIA78L08F	
L101	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L203	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L204	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L205	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L206	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L207	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L208	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L209	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L210	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L213	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L214	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L501	HLC100K02A	L CHIP COIL	10UH MLF 2012	
L505	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L506	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L507	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L508	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L509	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L510	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L512	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L513	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L514	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L515	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L516	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L517	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L518	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L519	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L523	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L531	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
L806	HLC472M01D	L CHIP COIL	4.7MH M SLF7045	
L807	HLC100K02A	L CHIP COIL	10UH MLF 2012	
L850	HLC100K01E	L CHIP COIL	10UH K 120120	
L851	HLC479K03C	L CHIP COIL	4.7UH K NLC5650T	
L902	HFF600C01A	F CHIP FERRITE BEAD	60 OHM PBY 2012	
L903	HFF600C01A	F CHIP FERRITE BEAD	60 OHM PBY 2012	
L904	HFF600C01A	F CHIP FERRITE BEAD	60 OHM PBY 2012	
L905	HFF600C01A	F CHIP FERRITE BEAD	60 OHM PBY 2012	
L906	HFF600C01A	F CHIP FERRITE BEAD	60 OHM PBY 2012	
L920	HFRMZA600A	F CHIP BEAD ARRARY	60 OHM MZA 3216Y	
L921	HFRMZA600A	F CHIP BEAD ARRARY	60 OHM MZA 3216Y	
L922	HFRMZA600A	F CHIP BEAD ARRARY	60 OHM MZA 3216Y	
L923	HFRMZA600A	F CHIP BEAD ARRARY	60 OHM MZA 3216Y	
L924	HFRMZA600A	F CHIP BEAD ARRARY	60 OHM MZA 3216Y	
L925	HFRMZA600A	F CHIP BEAD ARRARY	60 OHM MZA 3216Y	
LA23	HFF102C00A	F CHIP FERRITE BEAD	1000 OHM PBY 2012	
LA43	HLC100K02A	L CHIP COIL	10UH MLF 2012	
LA44	HLC100K02A	L CHIP COIL	10UH MLF 2012	
P902	4859297320	CONN WAFER	05002HR-50A01(G)	
Q506	T2SC2412KB	TR CHIP	2SC2412K-T146-BR	
Q507	T2SC2412KB	TR CHIP	2SC2412K-T146-BR	
Q511	T2SA1037KB	TR CHIP	2SA1037AKT146-R	
Q512	T2SC2412KB	TR CHIP	2SC2412K-T146-BR	
Q602	T2SA1037KB	TR CHIP	2SA1037AKT146-R	
Q701	T2SC2412KB	TR CHIP	2SC2412K-T146-BR	
Q702	T2SC2412KB	TR CHIP	2SC2412K-T146-BR	

LOC	PART CODE	PART NAME	DESCRIPTION	REMARK
Q802	T2SC2412KB	TR CHIP	2SC2412K-T146-BR	
Q804	T2SC2412KB	TR CHIP	2SC2412K-T146-BR	
Q805	T2SC2412KB	TR CHIP	2SC2412K-T146-BR	
Q820	T2SC2412KB	TR CHIP	2SC2412K-T146-BR	
Q850	T2SC2412KB	TR CHIP	2SC2412K-T146-BR	
QA01	T2SC2412KB	TR CHIP	2SC2412K-T146-BR	
QA02	T2SC2412KB	TR CHIP	2SC2412K-T146-BR	
QA03	T2SC2412KB	TR CHIP	2SC2412K-T146-BR	
QA04	T2SC2412KB	TR CHIP	2SC2412K-T146-BR	
QA08	T2SC2412KB	TR CHIP	2SC2412K-T146-BR	
QA21	T2SC2412KB	TR CHIP	2SC2412K-T146-BR	
R103	HRFT393JBA	R CHIP	1/10 39K OHM J 1608	
R104	HRFT683JBA	R CHIP	1/10 68K OHM J 1608	
R105	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
R135	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R140	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R141	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R143	HRFT102JBA	R CHIP	1/10 1K OHM J 1608	
R203	HRFT100JBA	R CHIP	1/10 10 OHM J 1608	
R204	HRFT470JBA	R CHIP	1/10 47 OHM J 1608	
R206	HRFT470JBA	R CHIP	1/10 47 OHM J 1608	
R207	HRFT100JBA	R CHIP	1/10 10 OHM J 1608	
R211	HRFT100JBA	R CHIP	1/10 10 OHM J 1608	
R212	HRFT470JBA	R CHIP	1/10 47 OHM J 1608	
R247	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	
R248	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	
R250	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	
R251	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	
R253	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R254	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R255	HRFT000-BA	R CHIP	1/10 0 OHM 1608	
R296	HRFT000-BA	R CHIP	1/10 0 OHM 1608	
R297	HRFT000-BA	R CHIP	1/10 0 OHM 1608	
R298	HRFT000-BA	R CHIP	1/10 0 OHM 1608	
R302	HRFT224JBA	R CHIP	1/10 220K OHM J 1608	
R303	HRFT224JBA	R CHIP	1/10 220K OHM J 1608	
R33	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R34	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R422	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
R504	HRFT152JBA	R CHIP	1/10 1.5K OHM J 1608	
R505	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R507	HRFT000-BA	R CHIP	1/10 0 OHM 1608	
R509	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R514	HRFT100JBA	R CHIP	1/10 10 OHM J 1608	
R515	HRFT153JBA	R CHIP	1/10 15K OHM J 1608	
R516	HRFT153JBA	R CHIP	1/10 15K OHM J 1608	
R518	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R519	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
R529	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R530	HRFT332JBA	R CHIP	1/10 3.3K OHM J 1608	
R532	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	
R533	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	
R534	HRFT221JBA	R CHIP	1/10 220 OHM J 1608	
R535	HRFT221JBA	R CHIP	1/10 220 OHM J 1608	
R538	HRFT473JBA	R CHIP	1/10 47K OHM J 1608	
R540	HRFT100JBA	R CHIP	1/10 10 OHM J 1608	
R541	HRFT393JBA	R CHIP	1/10 39K OHM J 1608	
R552	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
R553	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
R554	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
R555	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
R556	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R559	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R560	HRFT222JBA	R CHIP	1/10 2.2K OHM J 1608	
R561	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R565	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R566	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
R567	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	

Service part list

LOC	PART CODE	PART NAME	DESCRIPTION	REMARK
R568	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
R569	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
R574	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
R577	HRFT273JBA	R CHIP	1/10 27K OHM J 1608	
R591	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R592	HRFT102JBA	R CHIP	1/10 1K OHM J 1608	
R704	HRFT100JBA	R CHIP	1/10 10 OHM J 1608	
R705	HRFT223JBA	R CHIP	1/10 22K OHM J 1608	
R706	HRFT102JBA	R CHIP	1/10 1K OHM J 1608	
R708	HRFT104JBA	R CHIP	1/10 100K OHM J 1608	
R709	HRFT100JBA	R CHIP	1/10 10 OHM J 1608	
R710	HRFT202JBA	R CHIP	1/10 2K OHM J 1608	
R712	HRFT102JBA	R CHIP	1/10 1K OHM J 1608	
R715	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	
R720	HRFT122JBA	R CHIP	1/10 1.2K OHM J 1608	
R721	HRFT181JBA	R CHIP	1/10 180 OHM J 1608	
R722	HRFT241JBA	R CHIP	1/10 240 OHM J 1608	
R723	HRFT331JBA	R CHIP	1/10 330 OHM J 1608	
R724	HRFT471JBA	R CHIP	1/10 470 OHM J 1608	
R725	HRFT151JBA	R CHIP	1/10 150 OHM J 1608	
R726	HRFT681JBA	R CHIP	1/10 680 OHM J 1608	
R787	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R803	HRFT332JBA	R CHIP	1/10 3.3K OHM J 1608	
R804	HRFT123JBA	R CHIP	1/10 12K OHM J 1608	
R805	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
R807	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
R812	HRFT473JBA	R CHIP	1/10 47K OHM J 1608	
R813	HRFT473JBA	R CHIP	1/10 47K OHM J 1608	
R814	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	
R815	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	
R845	HRFT100JBA	R CHIP	1/10 10 OHM J 1608	
R846	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
R880	HRFT362FBA	R CHIP	1/10 3.6K OHM F 1608	
R881	HRFT202FBA	R CHIP	1/10 2K OHM F 1608	
R885	HRFT512JBA	R CHIP	1/10 5.1K OHM J 1608	
R931	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R932	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R933	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
R934	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
RA02	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
RA03	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
RA04	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
RA05	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	
RA06	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
RA07	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	
RA08	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
RA09	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
RA10	HRFT103JBA	R CHIP	1/10 10K OHM J 1608	
RA11	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	
RA12	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
RA21	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
RA54	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
RA55	HRFT131JBA	R CHIP	1/10 130 OHM J 1608	
RA56	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	
RA57	HRFT101JBA	R CHIP	1/10 100 OHM J 1608	
RA59	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
RA60	HRFT131JBA	R CHIP	1/10 130 OHM J 1608	
RA61	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	
RA72	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
RA73	HRFT472JBA	R CHIP	1/10 4.7K OHM J 1608	
RA76	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
RA77	HRFT131JBA	R CHIP	1/10 130 OHM J 1608	
RA78	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	
RA79	HRFT750JBA	R CHIP	1/10 75 OHM J 1608	

9. Power

9-1. IPB-6015N01/02(LIPS for DLX-20J1)

Input Requirements.

Input Voltage Range	Voltage Range:AC180V to 270V	Normal Voltage:AC 240V
Frequency Range	Frequency Range:47 To 63Hz	Normal Frequency:50 To 60Hz
Input Current	≤0.35 Arms at 240 Vac input	
Inrush Current	240V 30A peak	
Earth Leakage Current	3.5mA MAX(250AC)	
Hi-Pot Test Cutoff Current 10mA	Primary to GND:3000VAC for 1 minute 3.6KVAC for 3 seconds (mass production)	
Insulation Resistance	Insulation resistance shall be more then 4MΩ at 500Vdc between primary Live Neutral line and secondary.	
Input AC surge	The power supply withstand 300Vrms input for 10 seconds.	
Primary inlet F.G to secondary GND	25A for 3second 80mΩ MAX	

Output Requirements

Board	Output Voltage	Minimum output voltage	Maximum output voltage	Output Current			Condition
				MIN	NOR	MAX	
DEP	+15Vdc	+14.0Vdc	+16.5Vdc	0A	2A	2A	
	+9Vdc	+7.75Vdc	+9.8Vdc	0A	0.5A	1A	
	+5Vdc	+5.00Vdc	+5.5Vdc	130mA	0.5A	1A	
	+10V	This is the voltage for a signal. When attaching the product which is by the set, voltage became +8.5Vdc~+11.00Vdc. ※When the product does not attach from the set, +10V outputs are identical from 'output +15Vdc'					
	LAMP VOLTAGE (LPL 700V)	600Vdc	880Vdc	4.0mA	5.5mA	7.5mA	

10. Inverter

10-1. Feature

- Drive 6 lamps with one module
- Norminal current 6.5mArms for each lamp
- 21.6~26.4V input voltage operation
- Automatically balancing of lamp current
- Long lamp life with soft start
- Protection against lamp open or failure
- Built-in fuse
- Low EMI and spurious noise

10-2. Recommended operating conditions.

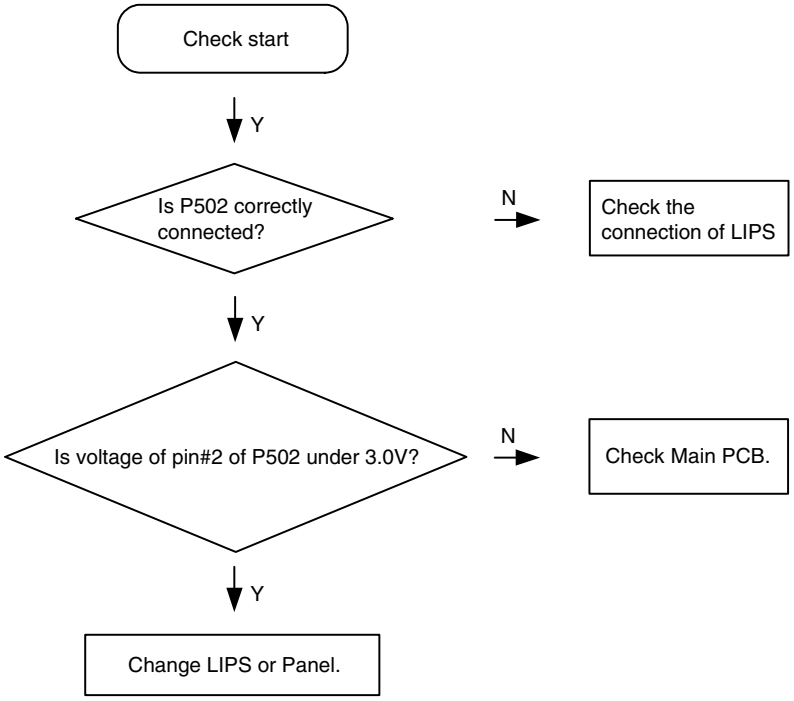
Parameter	Symbol	Recommendation			Units
		Min	R.C.	Max	
Input supply voltage	V_{IN}	21.6	24.0	26.4	V
Full bright lamp current	$I_{O(MAX)}$	4.0	6.5	7.5	mArms
Brightness control voltage range	V_{BRT}	0		5.0	V
Lamp on/off control voltage	V_{SLEEP}	3.0	5.0	7.0	V
Lamp operating voltage(reference)	V_O		850		Vrms
Operating ambient temperature range	T_A	0		50	°C

10-3. Connector and functional pin description

CN1 connector	: 20022WR-14 (Yeonho or Equivalent)
CN1 - 1~5	V_{IN}(DC Input : 24.0V)
CN1 - 6~10	G_{ND}(Power supply return)
CN1 - 11	V_{BRT}(Bright adjust : 0to 5.0V)
CN1 - 12	V_{SLEEP}(Lamp on : Low, Lamp off : High)
CN1 - 13	External PWM pulse input for bright adjust
CN1 - 14	Lamp status(Lamp on : Low, Lamp off : High)

10-4. Troubleshooting

*Backlight doesn't turn on



11. Exploded View

DLX-20J1

REV.	LIST OF MODIFICATION	REASON OF MODIFICATION	DATE	NAME	APPR
1					
2					

NO	PART CODE	PART NAME	QTY	MATERIAL	REMARKS
27					
26		LIPS PCB	1	POWER + INVERTER	
25		MAIN PCB	1	SL-130J/P/X	
24	7178301051	SCREW TAPPING	23	TT2 WAS 3X10 MFZN 3CR	
23	7178300851	SCREW MACHINE	4	TT2 WAS 3X8 MFZN 3CR	
22	7172401652	SCREW MACHINE	4	TT2 TRS 4X16 MFZN BK 3CR	
21	7122401412	SCREW MACHINE	14	TT2 TRS 4X14 MFZN BK 3CR	
20	7008301451	SCREW MACHINE	4	M-WAS 3X14 MFZN 3CR	
19	4857541301	COVER JACK	1	HIPS BK	
18	4853F82200	STAND	1	BLP-20J1/J3	
17	4853535500	HOLDER AC CORD	1	NYLON 66	
16	4853635301	TERMINAL ANT	1	HIPS BK	
15	4853176301	COVER BACK	1	HIPS BK	
14	4853296300	BRKT VESA	1	SECC T=0.8	
13	4857824000	CLOTH BLACK	2	T 0.7 A=150	
12	4853748801	RETA PCB	1	NYLON 66 NATURAL	
11	4853829301	FRAME MAIN PCB	1	SECC T=0.8	
10		LCD PANEL	1	20" BOE	
9	4852333001	PANEL CRTL	1	HIPS BK	
8	4857824000	CLOTH BLACK	1	T 0.7 A=110	
7	4854964011	BUTTON CH	1	HIPS GY	
6	4854872011	BUTTON POWER	1	HIPS GY	
5	4858318310	SPEAKER	2	SP-5090F01C	
4	4855556500	DECO SENSOR	1	GPPS MILKY	
3	4857743900	CUSION PANEL	2	T 1.0 A=300	
2	4852093411	MASK FRONT	1	HIPS GY	
1	4855626250	MARK BRAND	1	SILVER DIR CUTTING	

UNITS	mm	Designed by	Checked by	Inspected by	Approved by	ASSY NAME
		B.K. KIM	N.A	B.H. SEO	S.B. PARK	DEVELOPMENT DWG#/1)
SCALE	0.700	99-08-02				

DAEWOO ELECTRONICS Corp. Mechanical Design Team, REPAIR 팀

MODEL: BLP-20J1BHS
CHASSIS: SL-130J/P/X

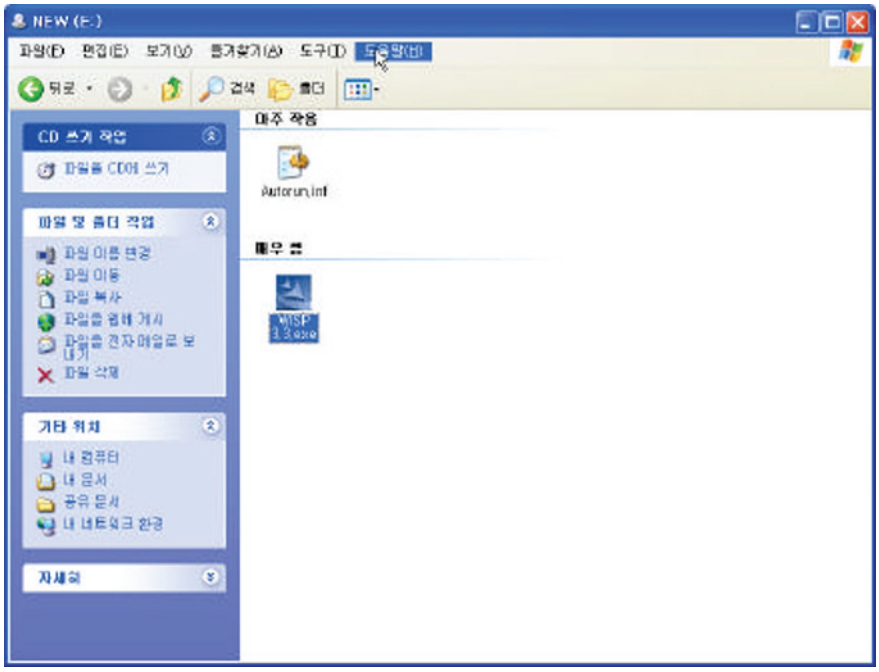
D/N: 485009SR

A0(1189mm X 841mm)

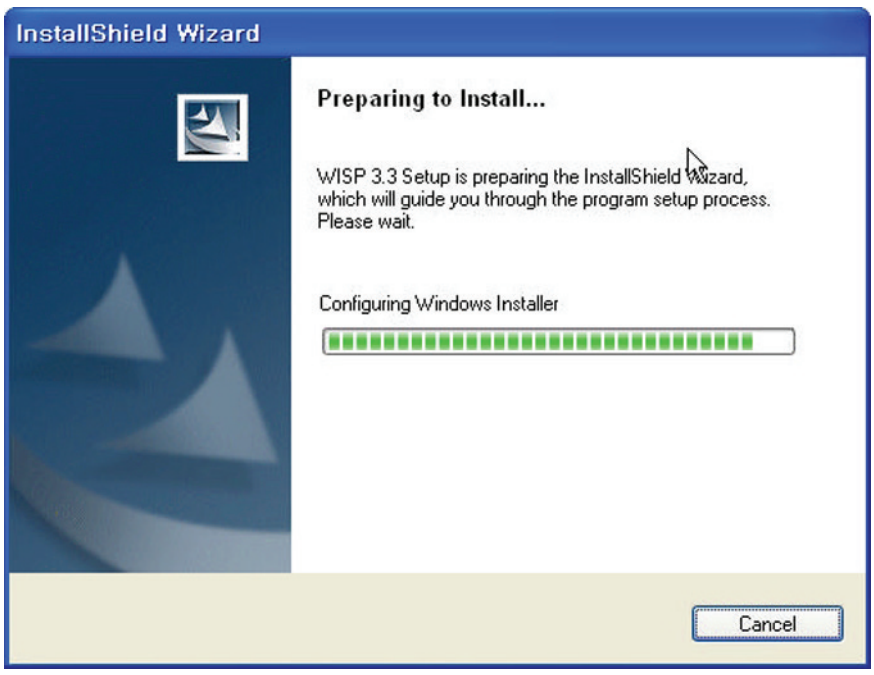
SOFTWARE INSTALL & UPGRADE

SOFTWARE INSTALL & UPGRADE

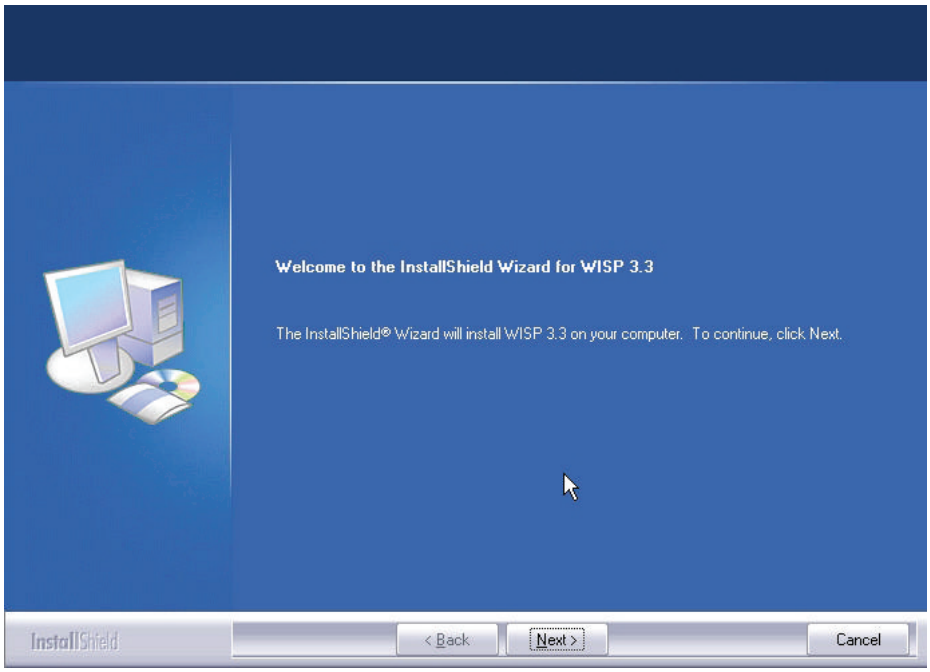
1. Software Upgrade TOOL Install
   1) After insert the CD to CDROM, open the folder.



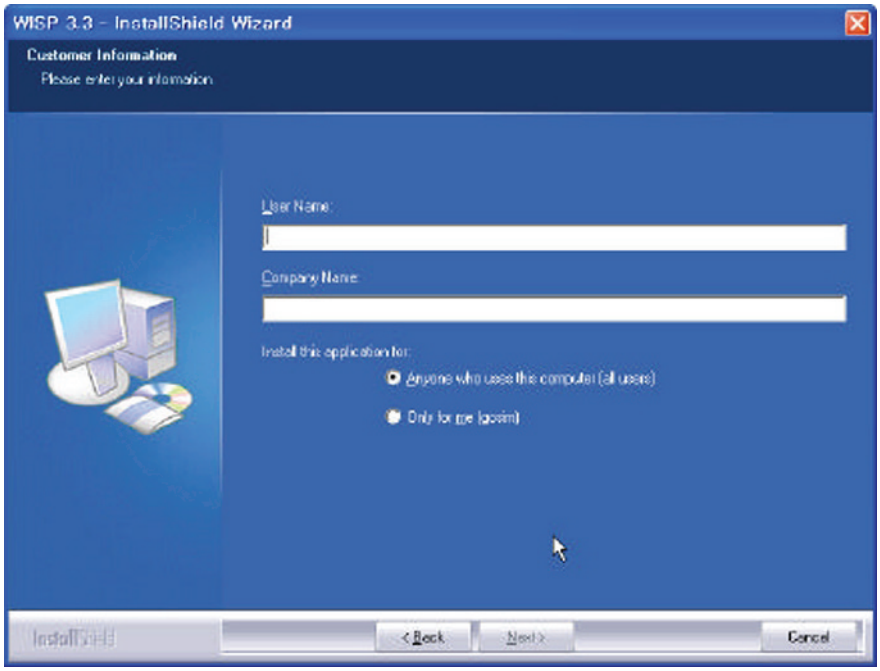
   2) Install the WISP 3.3 (Double click the WISP3.3.exe file)


InstallShield Wizard
Preparing to Install...
WISP 3.3 Setup is preparing the InstallShield Wizard, which will guide you through the program setup process. Please wait.
Configuring Windows Installer
Cancel

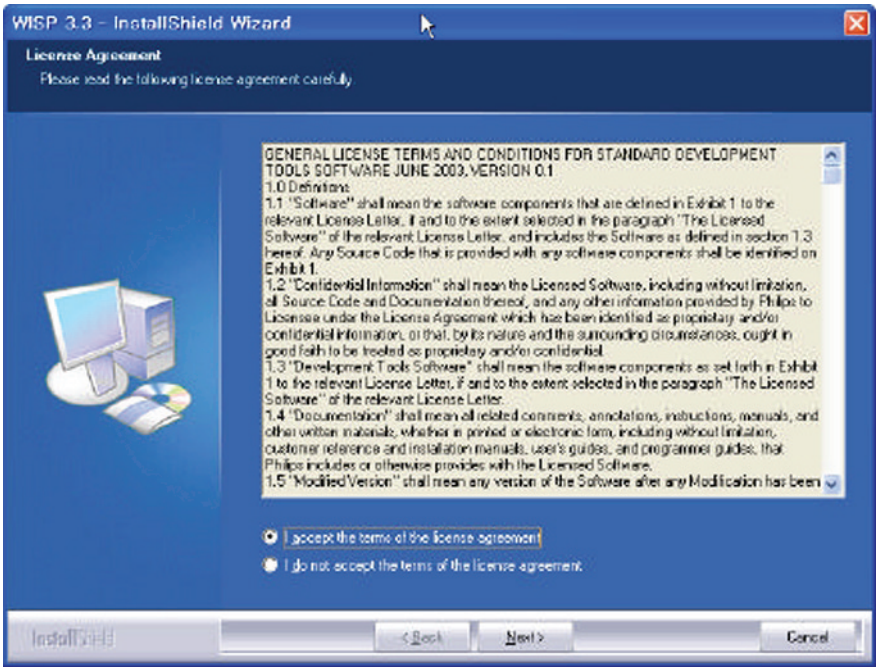
3) Press Next


Welcome to the InstallShield Wizard for WISP 3.3
The InstallShield® Wizard will install WISP 3.3 on your computer. To continue, click Next.
InstallShield
< Back
Next >
Cancel

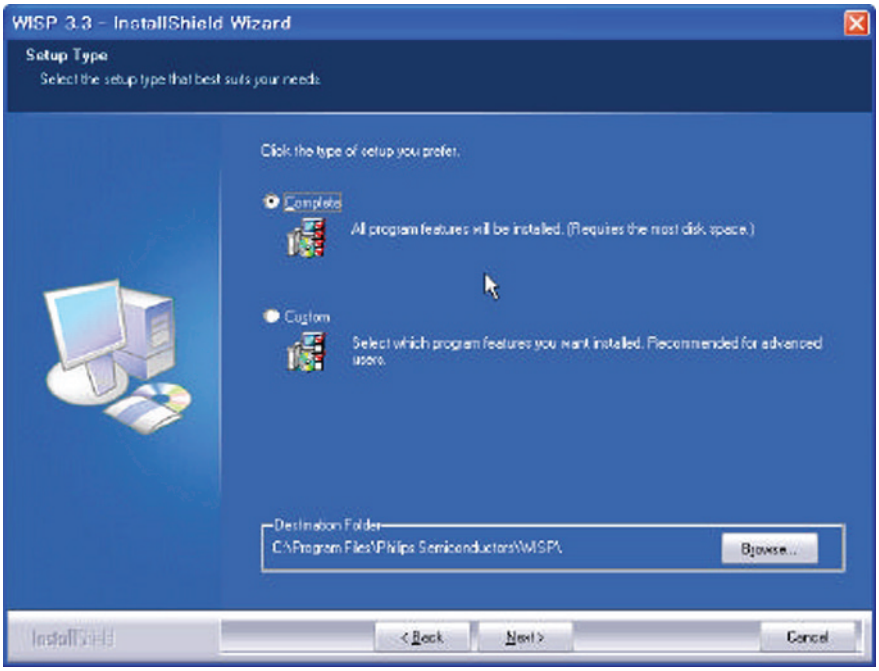
4) Enter user name and company name



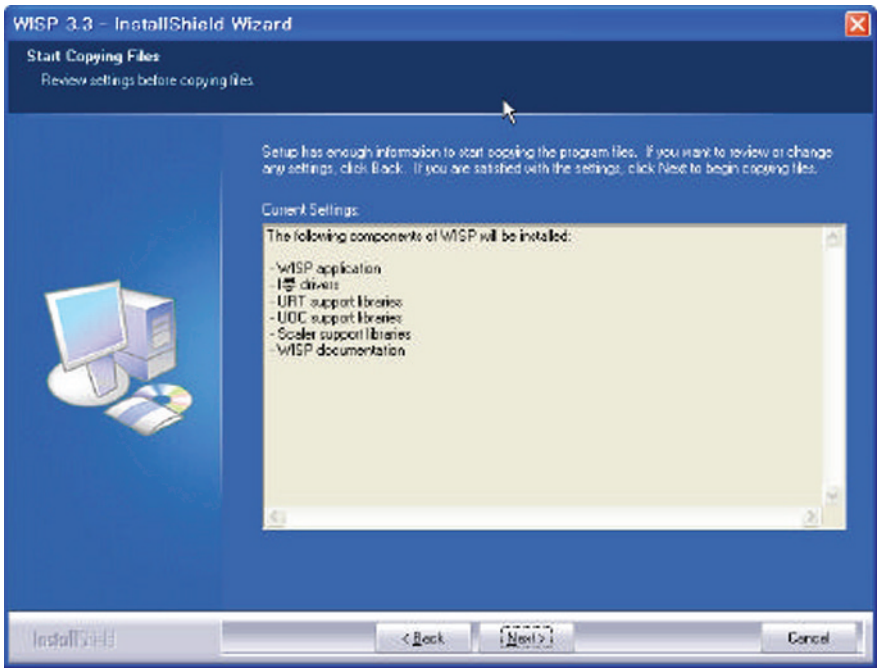
5) License agreement


WISP 3.3 - InstallShield Wizard
License Agreement
Please read the following license agreement carefully
GENERAL LICENSE TERMS AND CONDITIONS FOR STANDARD DEVELOPMENT TOOLS SOFTWARE JUNE 2003, VERSION 0.1
1.0 Definitions
1.1 "Software" shall mean the software components that are defined in Exhibit 1 to the relevant License Letter, if and to the extent selected in the paragraph "The Licensed Software" of the relevant License Letter, and includes the Software as defined in section 1.3 hereof. Any Source Code that is provided with any software components shall be identified on Exhibit 1.
1.2 "Confidential Information" shall mean the Licensed Software, including without limitation, all Source Code and Documentation thereof, and any other information provided by Philips to Licensee under the License Agreement which has been identified as proprietary and/or confidential information, or that, by its nature and the surrounding circumstances, ought in good faith to be treated as proprietary and/or confidential.
1.3 "Development Tools Software" shall mean the software components as set forth in Exhibit 1 to the relevant License Letter, if and to the extent selected in the paragraph "The Licensed Software" of the relevant License Letter.
1.4 "Documentation" shall mean all related comments, annotations, instructions, manuals, and other written materials, whether in printed or electronic form, including without limitation, customer reference and installation manuals, user's guides, and programmer guides, that Philips includes or otherwise provides with the Licensed Software.
1.5 "Modified Version" shall mean any version of the Software after any Modification has been
I accept the terms of the license agreement
I do not accept the terms of the license agreement
InstallShield
< Back
Next >
Cancel

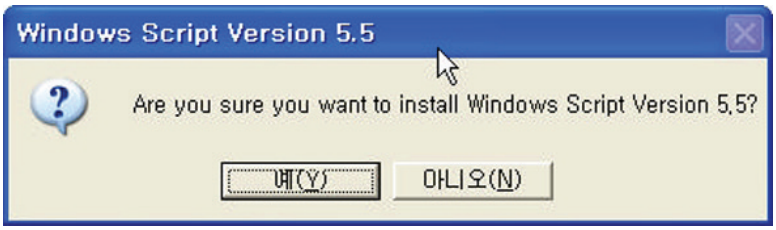
6) Select the “complete”


WISP 3.3 - InstallShield Wizard
Setup Type
Select the setup type that best suits your needs
Click the type of setup you prefer.
Complete
All program features will be installed. (Requires the most disk space.)
Custom
Select which program features you want installed. Recommended for advanced users.
Destination Folder
C:\Program Files\Philips Semiconductors\WISP\
Browse...
InstallShield
< Back
Next >
Cancel

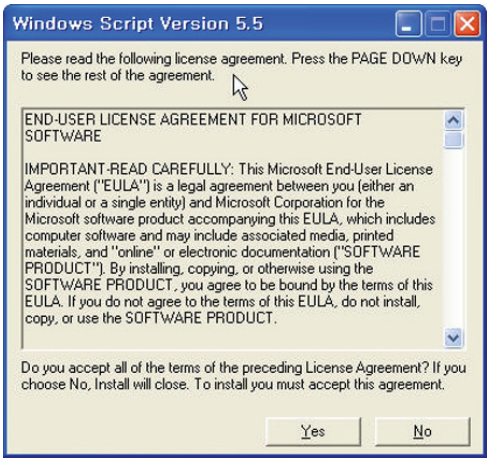
7) Press Next button


WISP 3.3 - InstallShield Wizard
Start Copying Files
Review settings before copying files.
Setup has enough information to start copying the program files. If you want to review or change any settings, click Back. If you are satisfied with the settings, click Next to begin copying files.
Current Settings:
The following components of WISP will be installed:
- WISP application
- I²C drivers
- URT support libraries
- UOC support libraries
- Scaler support libraries
- WISP documentation
InstallShield
< Back
Next >
Cancel

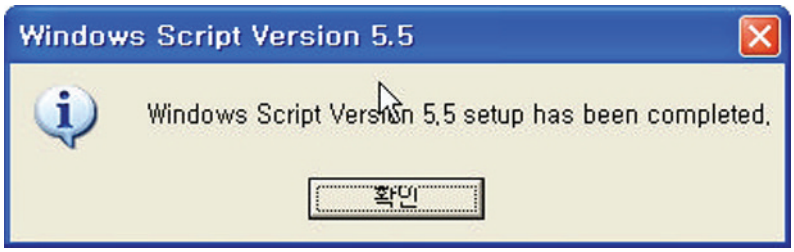
8) Select yes



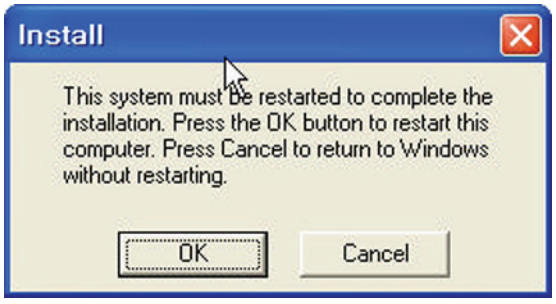
9) Select yes


Windows Script Version 5.5
Please read the following license agreement. Press the PAGE DOWN key to see the rest of the agreement.
END-USER LICENSE AGREEMENT FOR MICROSOFT SOFTWARE
IMPORTANT-READ CAREFULLY: This Microsoft End-User License Agreement ("EULA") is a legal agreement between you (either an individual or a single entity) and Microsoft Corporation for the Microsoft software product accompanying this EULA, which includes computer software and may include associated media, printed materials, and "online" or electronic documentation ("SOFTWARE PRODUCT"). By installing, copying, or otherwise using the SOFTWARE PRODUCT, you agree to be bound by the terms of this EULA. If you do not agree to the terms of this EULA, do not install, copy, or use the SOFTWARE PRODUCT.
Do you accept all of the terms of the preceding License Agreement? If you choose No, Install will close. To install you must accept this agreement.
Yes
No

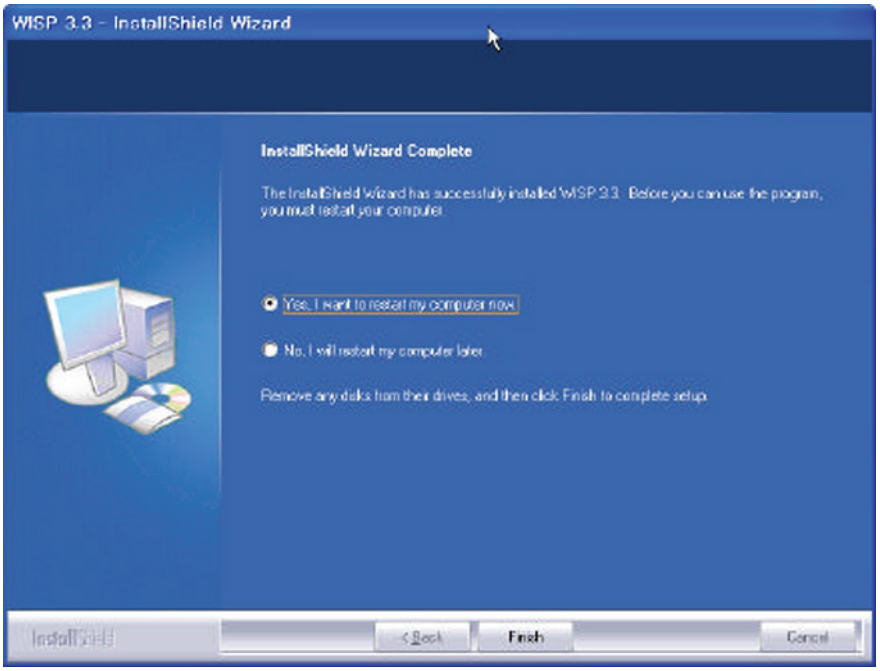
10) Select OK



11) Select OK


Install
This system must be restarted to complete the installation. Press the OK button to restart this computer. Press Cancel to return to Windows without restarting.
OK
Cancel

12) Select “I want to restart my computer now” then press Finish

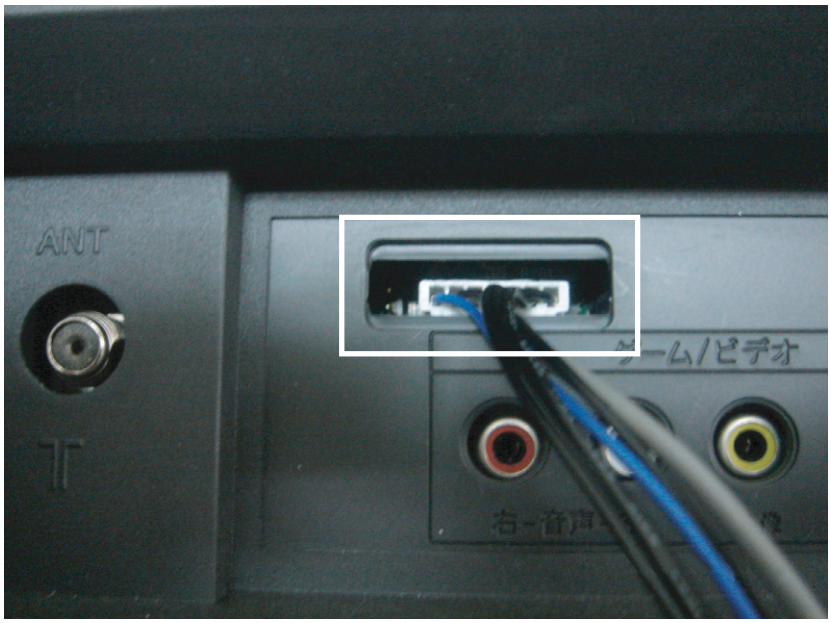

WISP 3.3 - InstallShield Wizard
InstallShield Wizard Complete
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish to complete setup.
< Back
Finish
Cancel

2. Software upgrade

1) Open the SVC cover for upgrading

i. Open the SVC cover

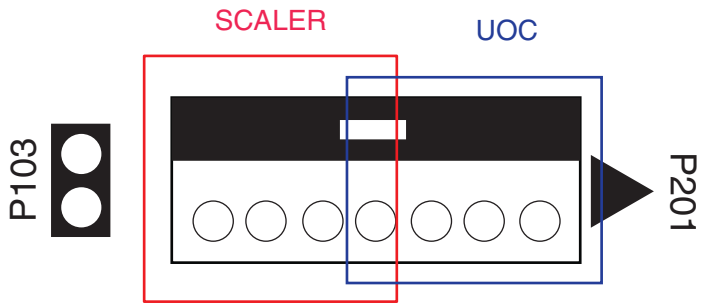
ii. Connect the correct cable for each software



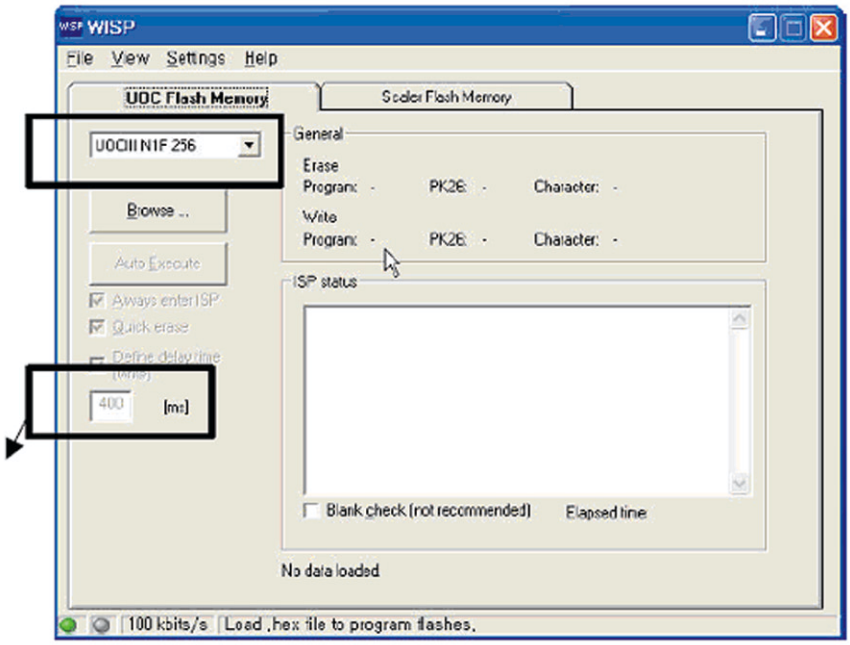
2) UOC upgrade

i. Connect the correct cable wire in P201 for UOC upgrading
(Real wire connection is the right side of P201)

ii. Connect jumper in P103

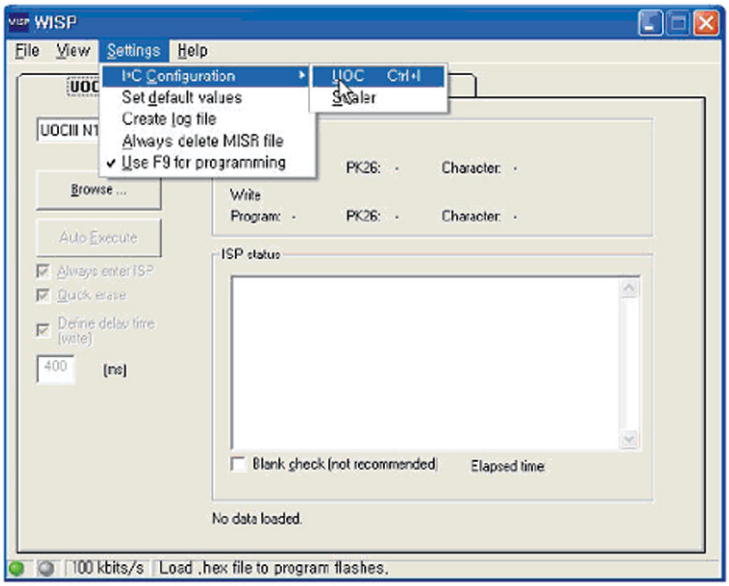


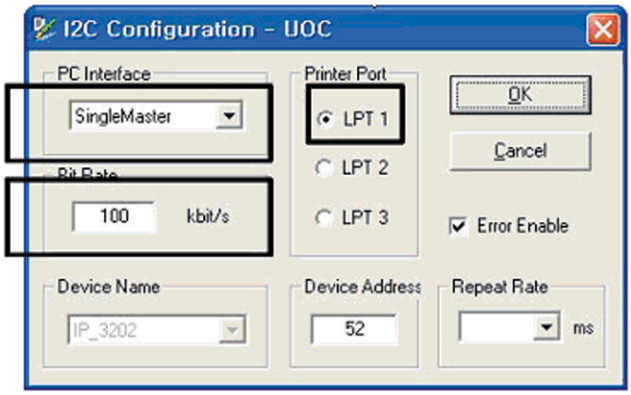
iii. Start WISP



- Select UOCIII NIF 256
- Set the “Define delay Time” 2ms

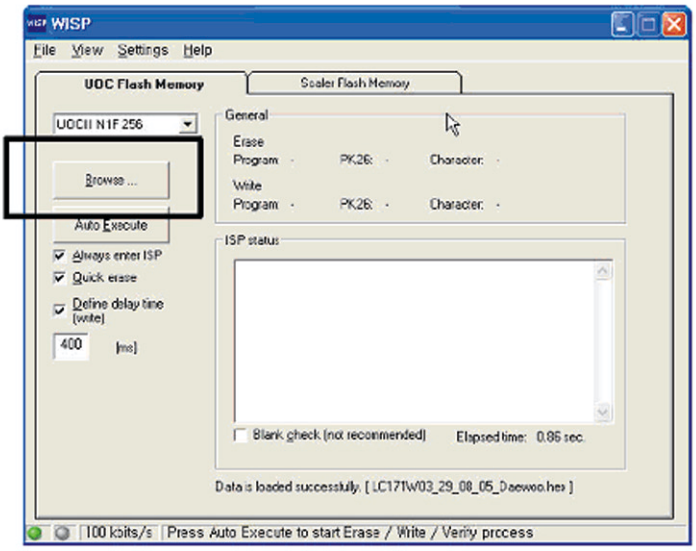
iv. IIC configuration setting





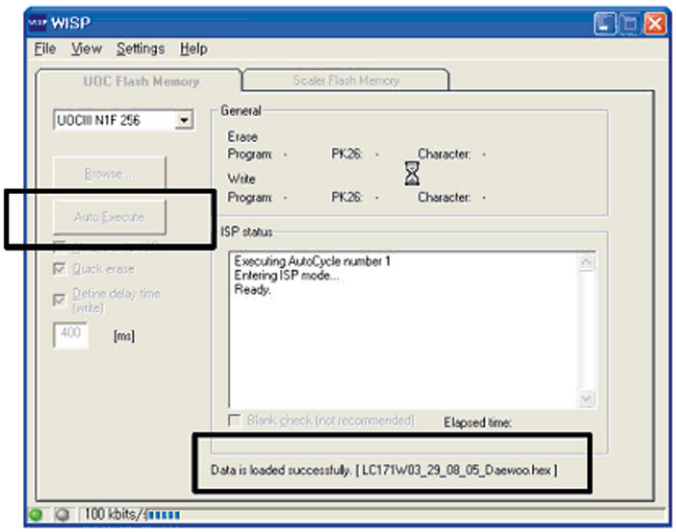
- Select “SingleMaster”
- Select “100Kbit/s”
- Select “LPT1”
- Press “OK”

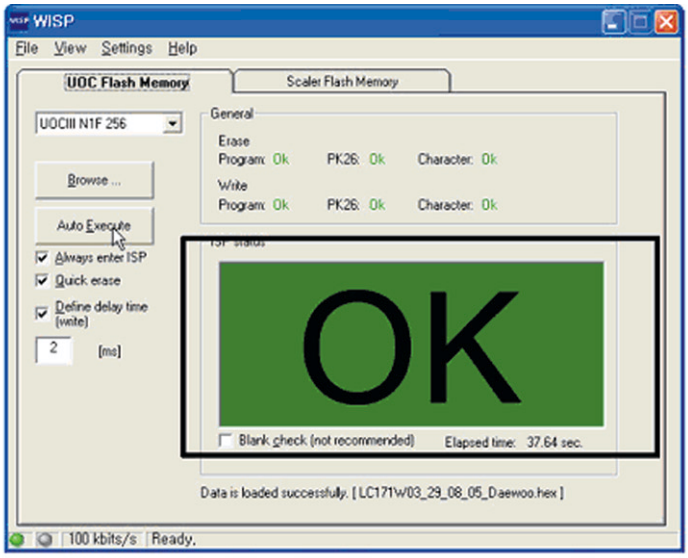
v. Browse file



- Press “Browse”
- Select the target file
- Press “Open”

vi. Upgrade



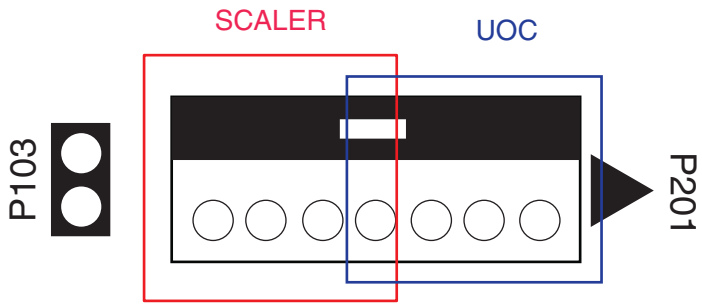


- Start “Auto Execute”
- Finish

3) Scaler(Sedna) upgrade

i. Connect the correct cable wire in P201 for Scaler upgrading
(Real wire connection is the Left side of P201)

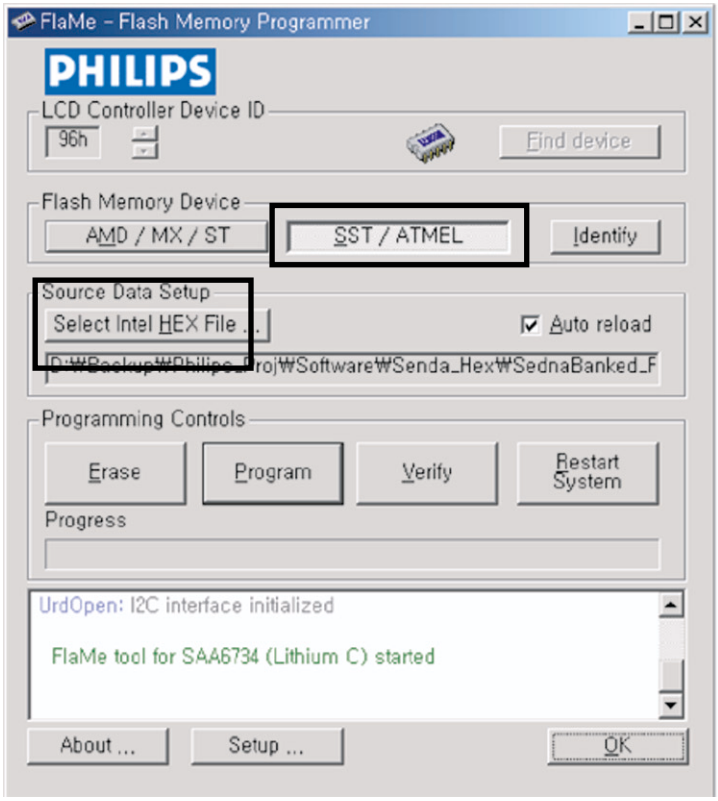
ii. Connect jumper in P103



iii. Start ISP Tool
- Find the “ISP_TOOL ” icon as below

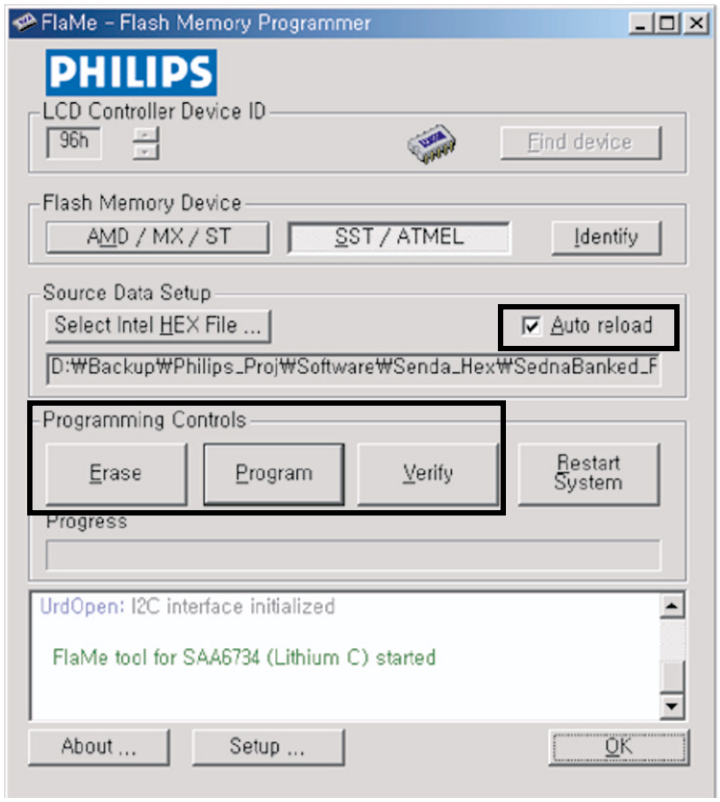
- Click and execute the Tool

iv. Configuration Setting



- Select “SST/ATMEL” device
- Press “Select Intel HEX File..”
- Select the target HEX file
- Press “Open”

v. Upgrade



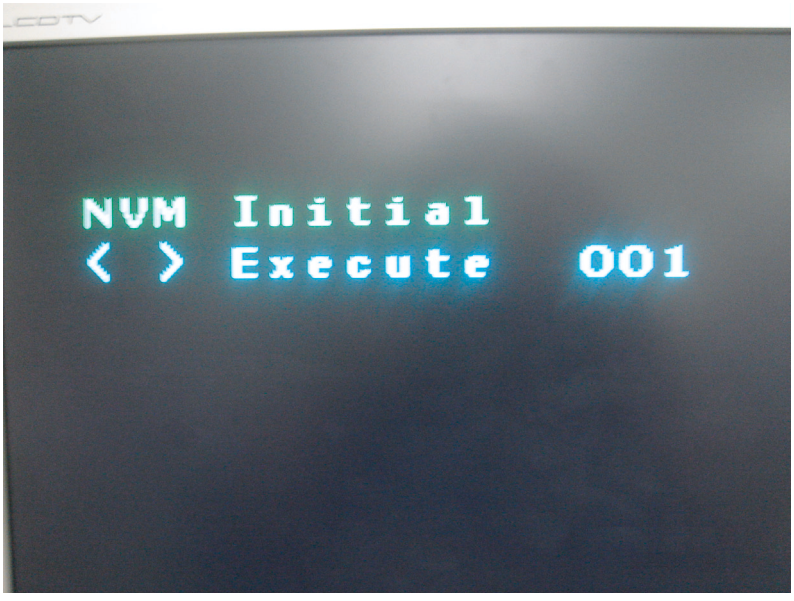
- Check “Auto reload”
- Upgrade “Erase —> Program —> Verify” in sequence
- Finish

3. NVM Reset(All EEPROM Data Reset)
   1) Purpose
      i. All data RESET
      ii. If you upgrade the UOC-III part then must do NVM RESET

2) Process

i. Press “S6”key in SVC remote controller

ii. Press “Right” direction key in SVC remote controller



- Then TV SET is turn off & on automatically`
- Finish

4. Shipping Reset
   1) Purpose
      i. To make Shipping condition
      ii. If you upgrade the UOC-III part then must do “SHIPPING” Reset
   2) Process
      i. Press “S12”key in SVC remote controller

ii. Then you can see “SHIPPING OK” on the RF Mode

- Be sure to wait until display on the screen “SHIPPING OK”
- Then turn off the TV Set
- Finish